

ARTOBOLEVSKIY, I.I., akademik; GERNET, M.M., doktor tekhn. nauk, prof.

Mechanism for plotting a trochoid and its possible use. Izv. vuz.  
ucheb. sav.; mashinostr. no.11/12:3-7 '58. (MIRA 13:3)

1.Moskovskiy aviatsionnyy institut im. S.Ordshekidze (for Artobolev-  
skiy). 2.Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti  
(for Gernet).

(Mathematical instruments)

ARTOBOLEVSKIY, I.I.

Conference on the theory of mechanisms at the High Technical  
School in Dresden. Izv.AN SSSR, Otd. tekhn. nauk no.12:153-155  
D '58. (MIRA 11:12)  
(Dresden--Mechanical movements--Congresses)

ARTOBOLVSKIY, I.I., akademik

Some new mechanisms. Trudy Inst.nash,Sem.po teor.math. 18  
no.69:5-12 . '58. (MIRA 12:9)  
(Mechanical movements)

SISYAKYAN, N.M.; FRANK, G.M.; SHCHERBAKOV, D.I., akademik; S. DORZHKO, A.V.;  
ARTOBOLYVSKIY, I.I., akademik; IL'IN, V.A., doktor tekhn. nauk;  
DOMANITSKIY, S.M., kand. tekhn. nauk; PETROV, A.P.; BUDNIKOV, P.P.

Soviet scientists on the exhibition. Vest. AN SSSR 28 no.11:100-118  
# '58. (MIRA 11:12)

1.Chlen-korrespondent AN SSSR. (for Sisayakyan, Sidorenko, Petrov,  
Budnikov). 2.Chlen-korrespondent AN SSSR (for Frank).  
(Brussels--Exhibitions)

30(7)

AUTHOR: Artobolevskiy, I. I., Academician 807/30-58-11-32/48

TITLE: Soviet Scientists on the Exposition (Sovetskiye uchenyye o vystavke)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 11, pp 109-111 (USSR)

ABSTRACT: The author is active in the field of technical sciences. He describes his impressions with regard to the exhibits in this field. In his opinion the Palace of Sciences was the most interesting pavilion in this respect. The author also stresses the fact that Soviet science was very impressively represented in this pavilion. Many national pavilions also demonstrated aspects of modern technology, but in the opinion of the author the exhibits in the Soviet pavilion were the most varied and impressive ones. In this connection he mentions the artificial earth satellites, the peaceful use of nuclear power etc. Of the other national pavilions he mentions those of Great Britain, France, Czechoslovakia, Belgium, the Federal Republic of Germany, Switzerland, and Japan. He concludes by expressing his disappointment at the US pavilion which contained only few, if excellent, exhibits which were of interest to the

Card 1/2

Soviet Scientists on the Exposition

807/30-58-11-32/18

expert in modern technology, although the United States  
are generally known and respected for their great performance  
in the field of modern technology. There is figure.

Card 2/2

Name : ARTOBOLEVSKIY, I. I.

Title : Academician

Remarks : I. I. Artobolevskiy is the author of an article entitled "Intelligent' Machines." The article mentions an original automatic milling machine with an electronic programming system, built by the Experimental Scientific Research Institute of Machine Tools and the Institute of Machine Science of the USSR Academy of Sciences. This 'intelligent' machine is able to perform even the most difficult tasks automatically. The instructions are written on films in special symbols, and a different film is given to the machine for each new task that it must perform.

Source : N: Vechernyaya Izvestiya, No. 288, 9 December 1958, p. 3, c. 1-3

3.

16(1)

PHASE I BOOK EXPLOITATION

SOV/2658

Artobolevskiy, Ivan Ivanovich

Teoriya mekhanizmov dlya vosproizvedeniya ploskikh krivyykh (Theory of Plane Curve-tracing Mechanisms) Moscow, Izd-vo AN SSSR, 1959. 253 p. (Series: Problemy teorii mashin) 4,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.

Ed.: N.I. Levitskiy, Doctor of Technical Sciences, Professor; Ed. of Publishing House: Z.N. Periya (Deceased); Editorial Board: I.I. Artobolevskiy, Academician (Resp. Ed.); A.A. Blagonrovov, Academician; N.G. Bruyevich, Academician; V.I. Dikushin, Academician; S.V. Serensen, Academician, Ukrainian SSR Academy of Sciences; S.V. Pinagin, Doctor of Technical Sciences, Professor; N.I. Levitskiy, Doctor of Technical Sciences, Professor; P.M. Dimentberg, Doctor of Technical Sciences; A.Ye. Kobrinskiy, Doctor of Technical Sciences; N.P. Rayevskiy, Candidate of Technical Sciences; and A.P. Bessonov, Candidate of Technical Sciences (Scientific Secretary).

PURPOSE: This book is intended for mathematicians and design engineers.

Card 1/5

Theory of Plane Curve-tracing Mechanisms (Cont.)

80V/2658

COVERAGE: This book generalizes the results of Soviet and foreign scientists in the theory of curve-tracing mechanisms, and presents the author's works on the subject, which have been published in various journals and periodicals in the last 10 to 15 years. In this book, the so-called geometric-algebraic approach, i.e., the combination of geometric constructions with the analytic theory of algebraic and transcendental curves, is developed. The monograph studies in detail mechanisms for tracing algebraic curves up to 4th order inclusive and certain mechanisms for tracing algebraic curves of higher order than 4th and of transcendent curves. The methods of tracing are given for closed curves and for open curves with one or more branches. The author thanks Professor N.I. Levitakiy, Doctor of Engineering Sciences, for editing the book, and A. (e. Kobrinskiy, Doctor of Engineering Sciences, for his valuable advice concerning the book. References appear in footnotes.

TABLE OF CONTENTS:

Preface

3

Ch. I. Fundamentals of the Theory of Curve-tracing Mechanisms With Higher Pairs of the Fourth Class

1. Tracing curves with centroid and trajectory pairs

7

2. Tracing curves with a three-link kinematic chain

7

Card 2/5

8

25(2)

PHASE I BOOK EXPLOITATION

507/2985

Artobolevskiy, Ivan Ivanovich, Nikolay Ivanovich Levitskiy, and  
Sergey Aleksandrovich Cherkudinov

Sintez ploskikh mekhanizmov (Synthesis of Planar Mechanisms)  
Moscow, Fizmatgiz, 1959. 1084 p. 10,000 copies printed.

Ed.: A. Ye. Kobrinskiy; Tech. Ed.: N. Ya. Murashova.

PURPOSE: The book is intended for scientific research workers,  
engineers, designers, lecturers, and students in advanced courses  
at schools of higher technical education.

COVERAGE: The book discusses exact and accurate methods of the  
synthesis of mechanisms. Problems solved by algebraic methods  
are distinguished from problems solved by geometrical methods.  
In some cases suggestions are made for the application of the method  
being discussed to particular space mechanisms. The uses of  
general methods of synthesis are illustrated by examples. A  
list of basic literature is presented. It includes works  
published up to 1957. The Introduction contains historical and  
bibliographical information on the development of the theory  
Card 1/10

Synthesis of Planar Mechanisms

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of the synthesis of mechanisms. The authors thank Professor Ya. L. Geronimus, Doctor of Physical and Mathematical Sciences, and A. Ye. Kobrinskiy, Doctor of Technical Sciences, for their comments and suggestions. There are 285 references: 172 Soviet, 81 German, 19 English, 12 French, and 1 Latin.

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2. Four-link mechanisms	44
3. Five-link mechanisms	62
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Card 2/10	

25(2), 28(1)

SOV/30-59-5-4/61

AUTHOR: Artobolevskiy, I. I., AcademicianTITLE: Important Problems of the Theory of Machines and Mechanisms  
(Vazhnyye problemy teorii mashin i mekhanizmov)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 3, pp 19-20 (USSR)

ABSTRACT: In the present paper the author reports on the stage of these problems and refers to those questions which are of special current interest and consequently should be solved first of all. A particularly urgent problem is the development of the general theory and the calculation methods for automatic machines and mechanisms, which partly consist of rigid elements such as levers, cams and cogwheels. In this connection special attention should be devoted to the new cogging method of M. L. Nevikov. A great deal remains to be done also in the synthesis and calculation of hydraulic, pneumatic and electrical equipment of automatic machines. The synthesis of systems with a preset course for the treatment of complicated parts is mentioned as an important problem. For nuclear engineering and other activities unhealthy for man special manipulating mechanisms are necessary which permit remote control. The Institut

Card 1/2

Important Problems of the Theory of Machines and Mechanisms SOV/30-59-3-4/61

mashinovedeniya Akademii nauk SSSR (Institute of Machine Construction of the Academy of Sciences, USSR) deals with this problem. Continuously more importance is attached to dynamical problems of machines which are regarded as elastic systems. In this connection the author makes reference to papers of I. V. Meshcherskiy. The investigation of the actual motions of the system motor - working machine is also regarded as an important problem of the modern theory of machines. Finally the author states that at present more attention should be devoted to this field by the Academies of Sciences of the USSR and the Union's Republics, the Branch Academies of Sciences, scientific research institutions, construction- and design-offices, industrial laboratories and chairs of universities. For the purpose of coordinating this work the author suggests to establish leading institutes for the individual problems. The AS USSR should attach more importance to the development of the Institute of Machine Building and its corresponding laboratories.

Card 2/2

ARTOBOL'VSKIY, I.I., akademik; KUDRYAVTSEV, P.S., prof.; GORODNIKOV, K.F.,  
prof.; REHONSHITSKIY, B.N., kand. tekhn. nauk; DROGOV, A.A., kand.  
tekhn. nauk; VASIL'YEV, I.G., kand. tekhn. nauk; ISLAMOV, O.I., kand.  
geol.-miner. nauk; IMONOV, N.I., prof.; RAZNOVICH, Ye.A., doktor geol.-  
miner.nauk; KUZNETSOV, B.G., prof.; MARIYENBAKH, L.M., prof.;  
RUBINSHEVYH, M.I., prof.; KALMYKOV, K.F., kand. tiel. nauk;  
KOMPENRATOV, I.Ya., prof.; KOZLOV, A.G.; ZUBOV, V.P., prof.;  
IMSHINETSKIY, A.A.; DORFMAN, Ya.G., prof.; SHUKHARDIN, S.V., kand.  
tekhn.nauk; KEDROV, B.M., prof.; DANILEVSKIY, V.V., akademik; SHATSKIY,  
N.S., akademik; BYKOV, I.M., akademik.

Speeches. Vop. ist. est. i tekhn. no.6:111-141 '59.

(MIRA 12:6)

1. Chlen-korrespondent AN SSSR (for Imshinetskiy). 2. AN USSR  
(for Danilevskiy).

(Science) (Technology)

ARTOBOLVSKIY, V.M.

Previous discovery of *Lepus timidus* Lin. in Penza Province,  
Bauk. zap. Kiev. un. 9 no. 6:160 '50. (NIRA 9110)  
(Penza Province--Hares)

ARTODOLYVSKIY, V.M.

Migration of the slender-billed nuthacker (*Hemiprocne coryzostictes macrorhynchos* Brehm) in the Ukraine in recent years. Dokl. Zap. Kiev. un. 9 no. 6: 161 '50.  
(Ukraine--Nuthackers (Birds)) (Birds--Migration) (USSR 9110)

ARTOKHIN, Yu.A.

Recording the optical density distribution with a point densi-  
tometer. Prib. i tekhn. eksp. 9 no.3:218-219 My. Zh. '64  
(MI 28 18:1)

180 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

Adhere to planned maintenance schedules. Bezop. truda i prod.  
8 no. 14:33-35 I '64. (MIRA 18-3)

1. Gosudarstvennyy komitet pri Sovete Ministrov RS SSSR po nadzoru  
za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.

GUBITSYN, N.M., otv. red.; ARTOMASOV, A.D., otv. red.;

[Provisional regulations on safety engineering and industrial hygiene for explosion- and fire-hazardous chemical industries] Vremennye pravila tekhniki bezopasnosti i promsanitarii dlia vzryvo- i ognepasnykh khimicheskikh proizvodstv. Moskva, Izd-vo "Nedra," 1964. (MIRA 1':9)  
79 p.

1. Russia (1917- R.S.F.S.R.) Gosudarstvennyy komitet po nadzoru za bezopasnym vedeniem rabot v promyshlennosti i gornomu nadzoru.

ARTSABKA, A.L.

Upper Tortonian and Lower Sarmatian sediments in the Inner zone  
of the Carpathian piedmont fault. Geol. zhur. 23 no.5:100-  
101 '63. (MIRA 16:12)

1. Geologorosschukova kontora trestu "L'vivnaftogazrozvidka."

ARTSEULOV, K.

Subject : USSR/Aeronautics - Miscellaneous AID P - 5289  
Card 1/1 Pub. 58 - 7/11  
Author : Artseulov, K.  
Title : How the spin was vanquished  
Periodical : Kryl. rod., 9, 15-16, 8 1956  
Abstract : The author relates how, on September 23, 1916, allegedly for the first time in the history of aviation, he succeeded to bring a Nieuport 21 plane out of an intentionally created spin. 1 photo.  
Institution : None  
Submitted : No date

ARTSEULOV, K.

First wings. Kryl.rod. 14 no.7:27-29 J1 '63. (MIRA 16:9)  
(Gliding and soaring)

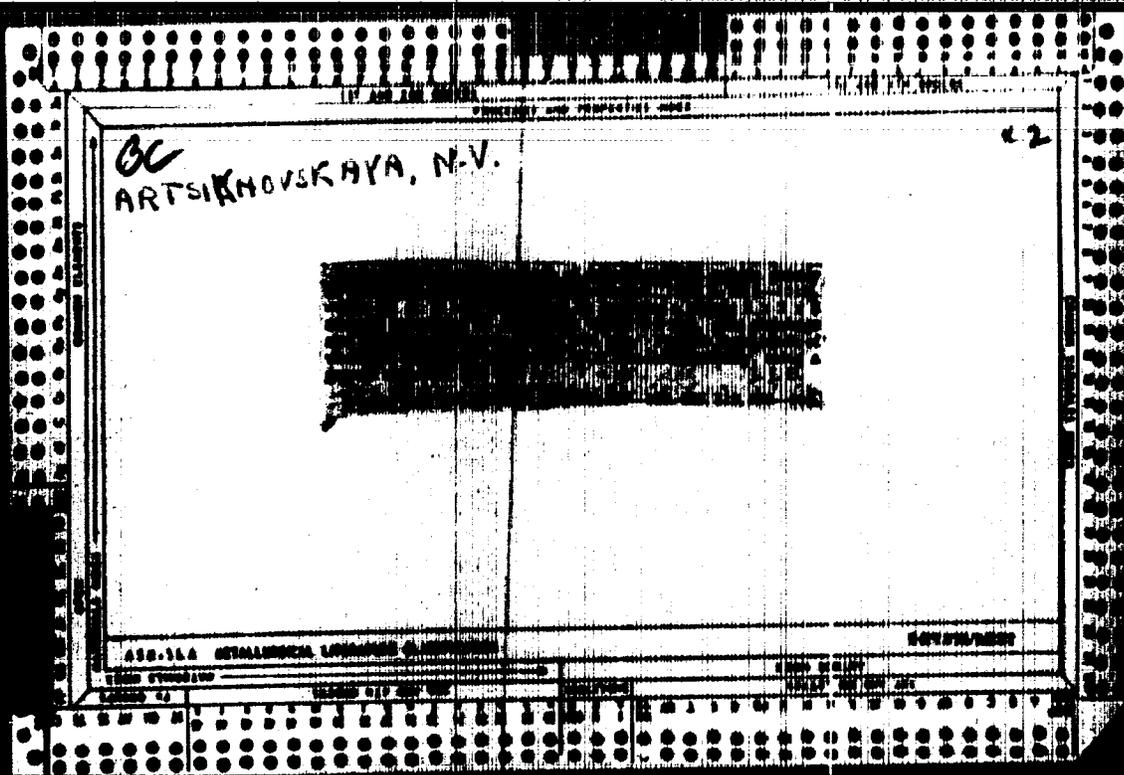
ARTSEV, A.I., inzh.

Determining the operational capacity of infiltration water in-  
takes. Vod. 1 sam. tekhn. no.4:26-32 Ap '64 (4IRA 18:1)

MEL'NIKOV, A.I.; ARTSIBASHEVA, L.I.

Mechanism of the cleaning of the reinforcement frames. Koks i khim.  
no.8:30 '62. (MIRA 17:2)

1. Magnitogorskiy metallurgicheskiy kombinat.



ARTSIKHOVSKAYA, N.V.; RUBIN, B.A., prof., otv. red.; ROMANOVSKAYA, Ye.S.,  
red.

[International bibliography of photosynthesis] Fotosintez; ukazatel'  
otechestvennoi i inostranoi literatury. Otv. red. B.A.Rubin. Biblio-  
graficheskii red. E.S.Romanovskaya. Moskva, Izd-vo Mosk. univ.  
Vol.1.1951-1958, Part 1. 1961. 387 p. (MIRA 14:6)  
(Bibliography--Photosynthesis)

ARTSIKHOVSKAYA, N.V.; RUBIN, B.A., prof., otv. red.

[Photosynthesis; index of Russian and foreign literature] Fotosintez; ukazatel' otechestvennoi i inostranoi literatury. Otv. red. B.A.Rubin. Bibliograficheskii red. E.S.Romanovskaia. Moskva, Izd-vo Mosk. univ. Vol.1. 1951-1958. Pt.2. 1961. 401 p.  
(MIRA 14:10)

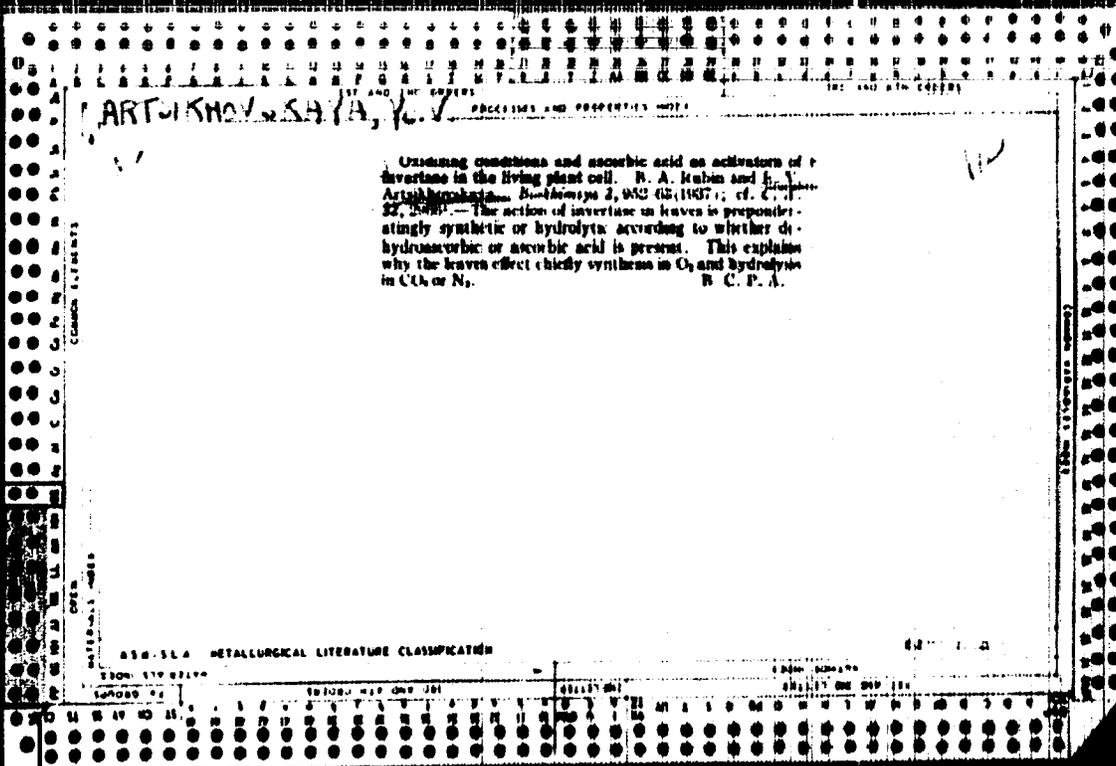
(Bibliography—Photosynthesis)

ARTSIKHOVSKAYA, N.V.; RUBIN, B.A., prof., otv. red.; ROMANOVSKAYA, Ye.S.,  
red.; RUBIN, B.A., red.

[Photosynthesis; index of Soviet and foreign literature] Foto-  
sintez; ukazatel' otechestvennoi i inostrannoii literatury. Otv.  
red. B.A.Rubin. Bibliogr. red. E.S.Romanovskaya. Moskva, Izd-vo  
Mosk. univ., Vol.1. 1951-1958. Pt.3. 1961. 504 p.

(Bibliography--Photosynthesis)

(MIRA. 1962)



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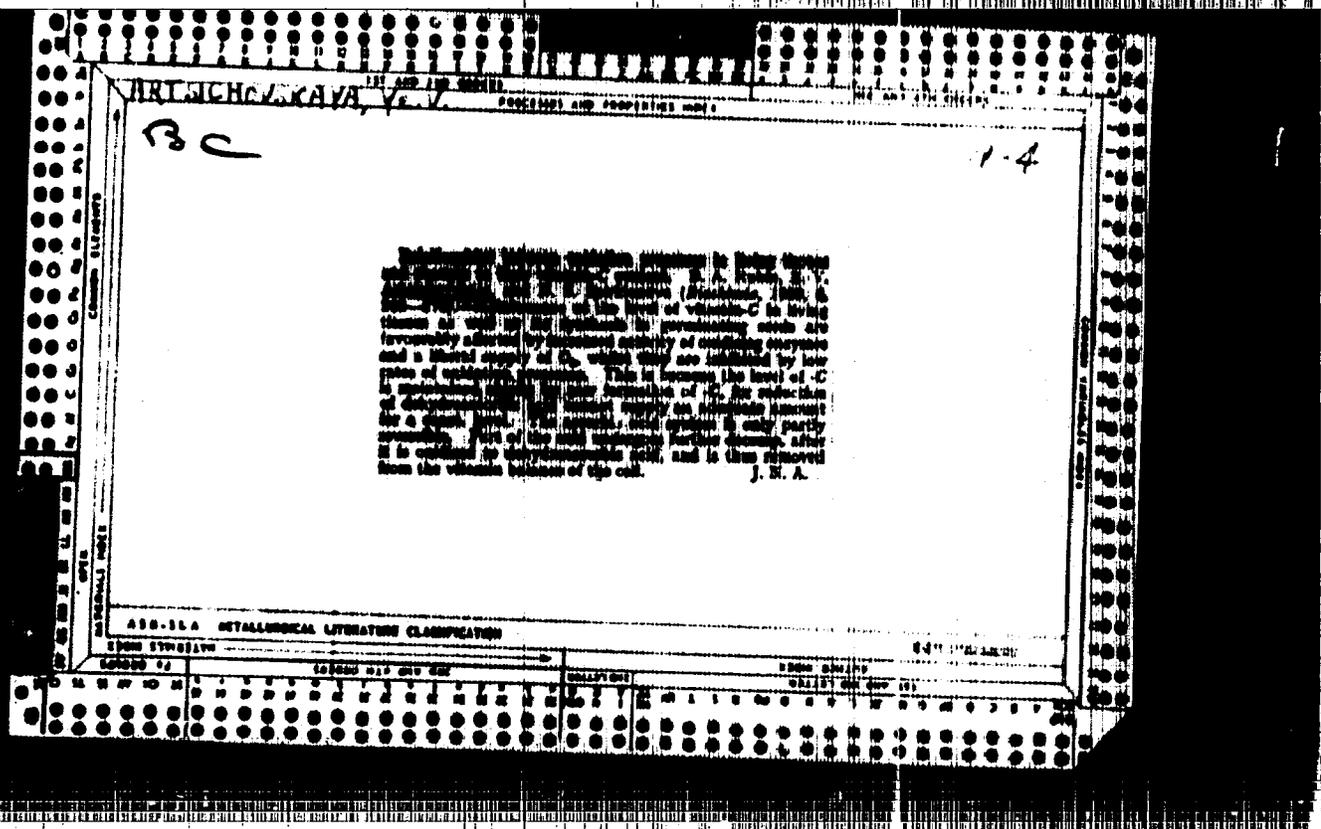
11d

Sources of vitamin C formation in the living plant cell  
H. A. Rubin, E. Y. Artyukhovich, N. S. Spiridonova  
and O. T. Lashova. *Biohimiya* 4, 200-7(1969). The  
ascorbic acid content increased when wheat sprouts were  
infiltrated by a soln. of sucrose. In a N atm. no increase  
was observed, whereas in O<sub>2</sub> the increase in ascorbic acid  
as a result of the infiltrated sugar was 2.5 times the normal  
content. Oxidation processes in living tissues and the  
changes in their vitamin C content. *Ibid.*, 206-75. The  
content of vitamin C in germinating seeds increased when  
the cells are supplied with a good source of O<sub>2</sub>. Deprotonating  
the oxidative processes leads to a fall in the vitamin C  
content. H. Proskier

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

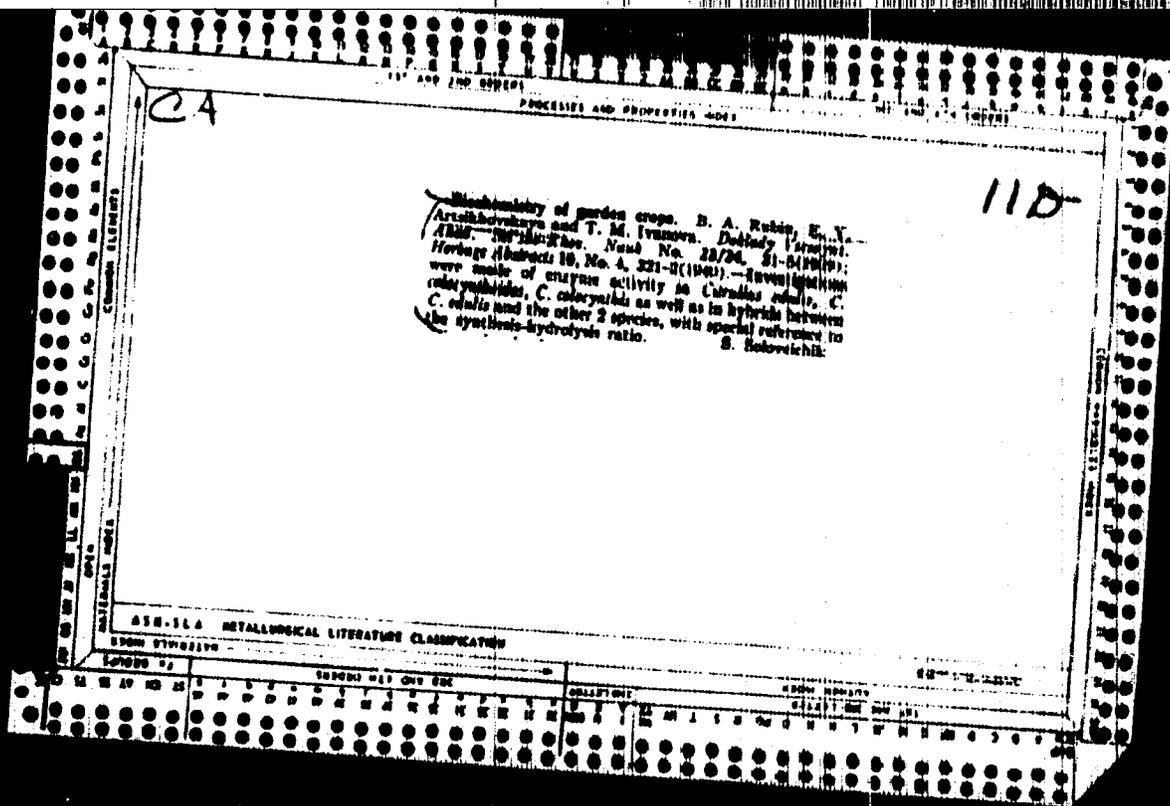
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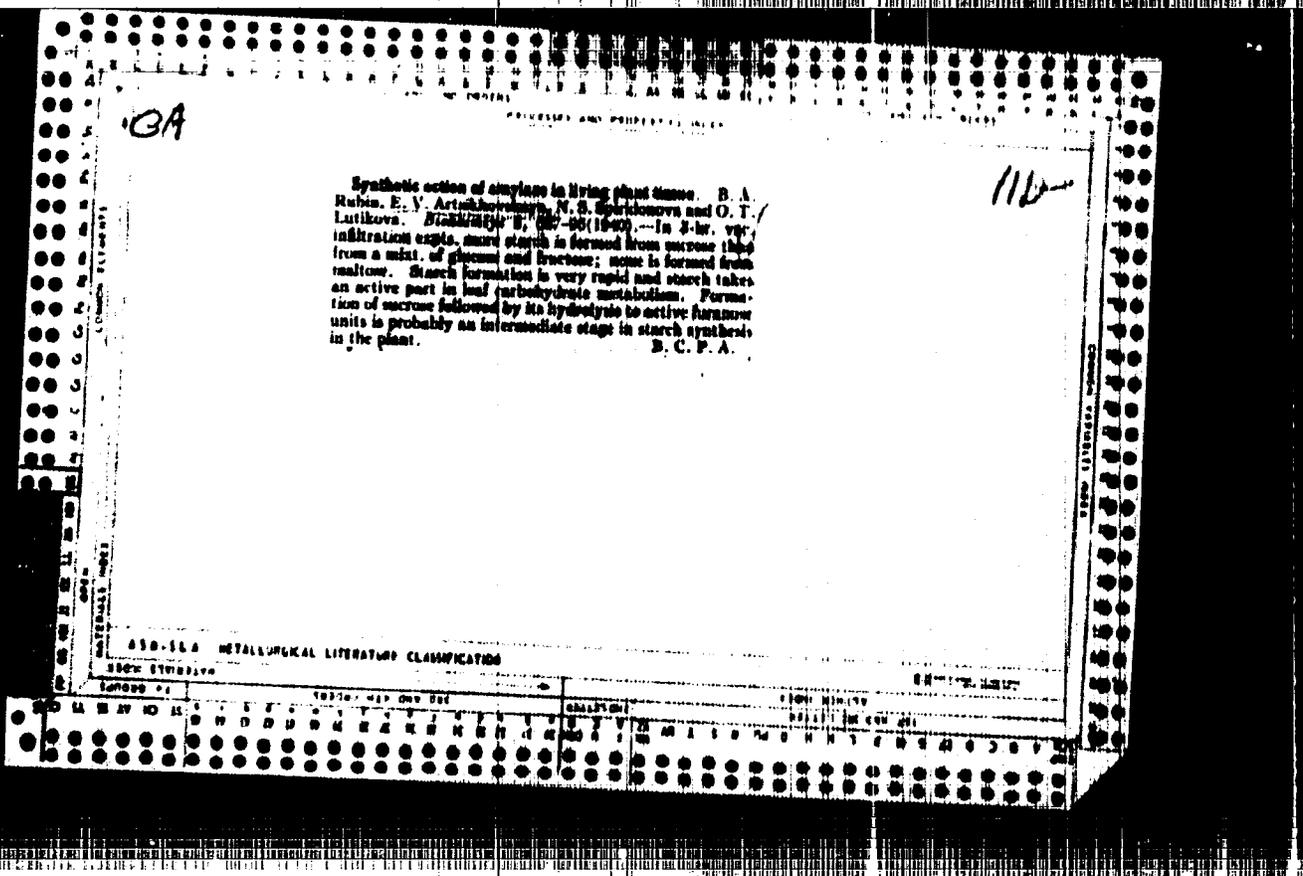
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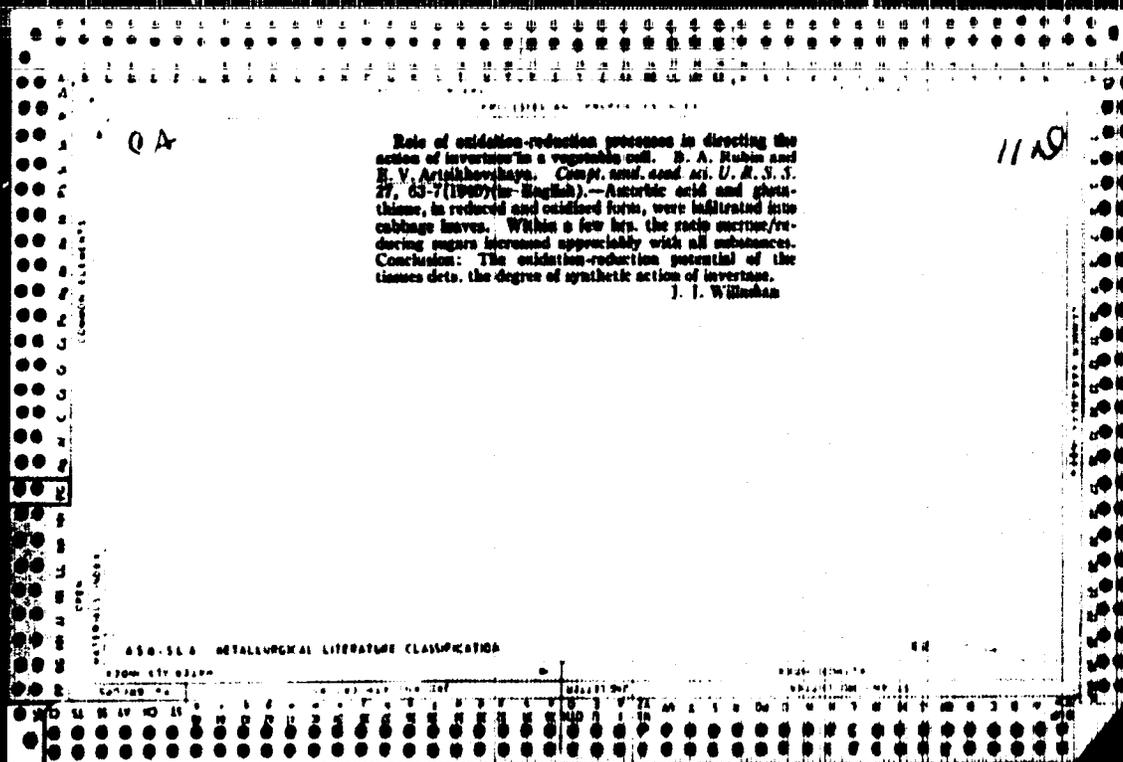


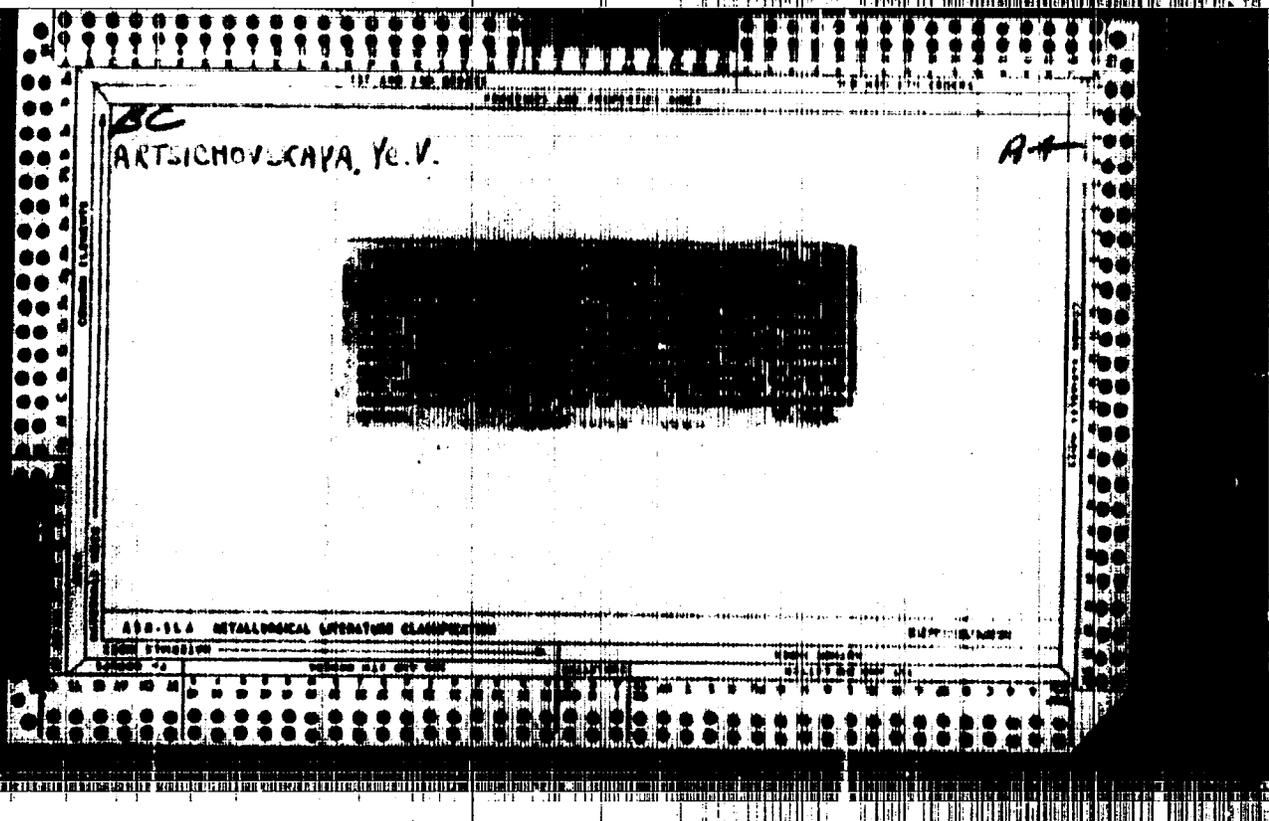
Particulars in enzymic system of various peas.  
 Arshibovskaya and N. S. Spiridonova. *Comp. Rend. Acad. Sci. USSR* 1957, 5: 23, 155-7 (1958) (in English).  
 Studies made on the late, intermediate and early green grain-peas and the Albanian late and Lightning early sugar-peas showed that the synthetic action of the prothylase (15-min exposure) is higher in the late varieties, in the early ones it is zero. The latter condition is attributed to the fact that the tests dealt with the leaves and young pods and not with the ripening grain, where the protein is chiefly stored. In the 3 grain-peas tested, the ratio of protein N is nearly the same, but in the sugar-peas, the ratio in the late, is greater than in the early ones. It is concluded that the storage of protein in N-storing plants is governed in the same way as the storage of sugar in the carbohydrate type of plant; i. e., the high synthetic activity of the enzyme is responsible for the increase in storage of the resp. groups and is related to the lateness of the variety concerned.  
 Maurice M. Rath

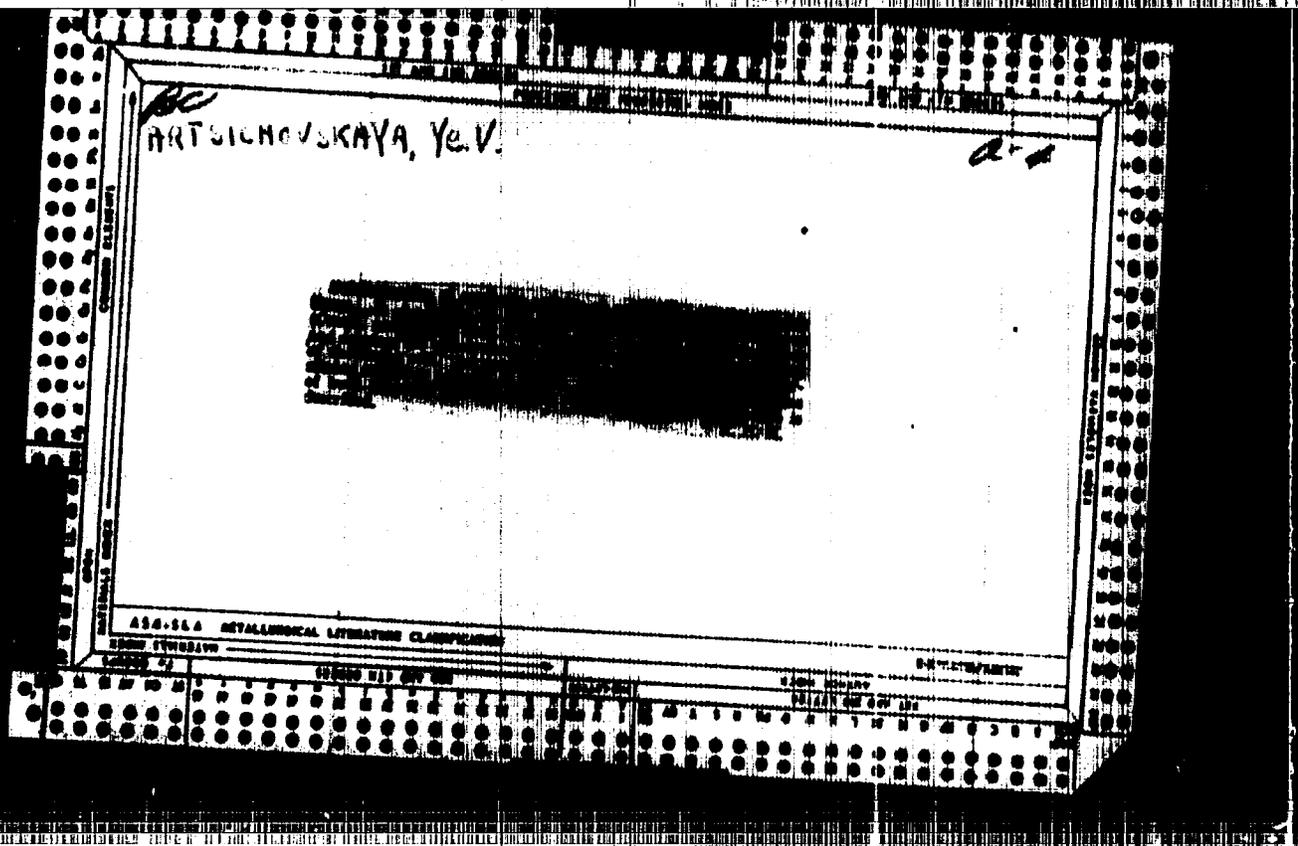
430 514 METALLOGICAL LITERATURE CLASSIFICATION

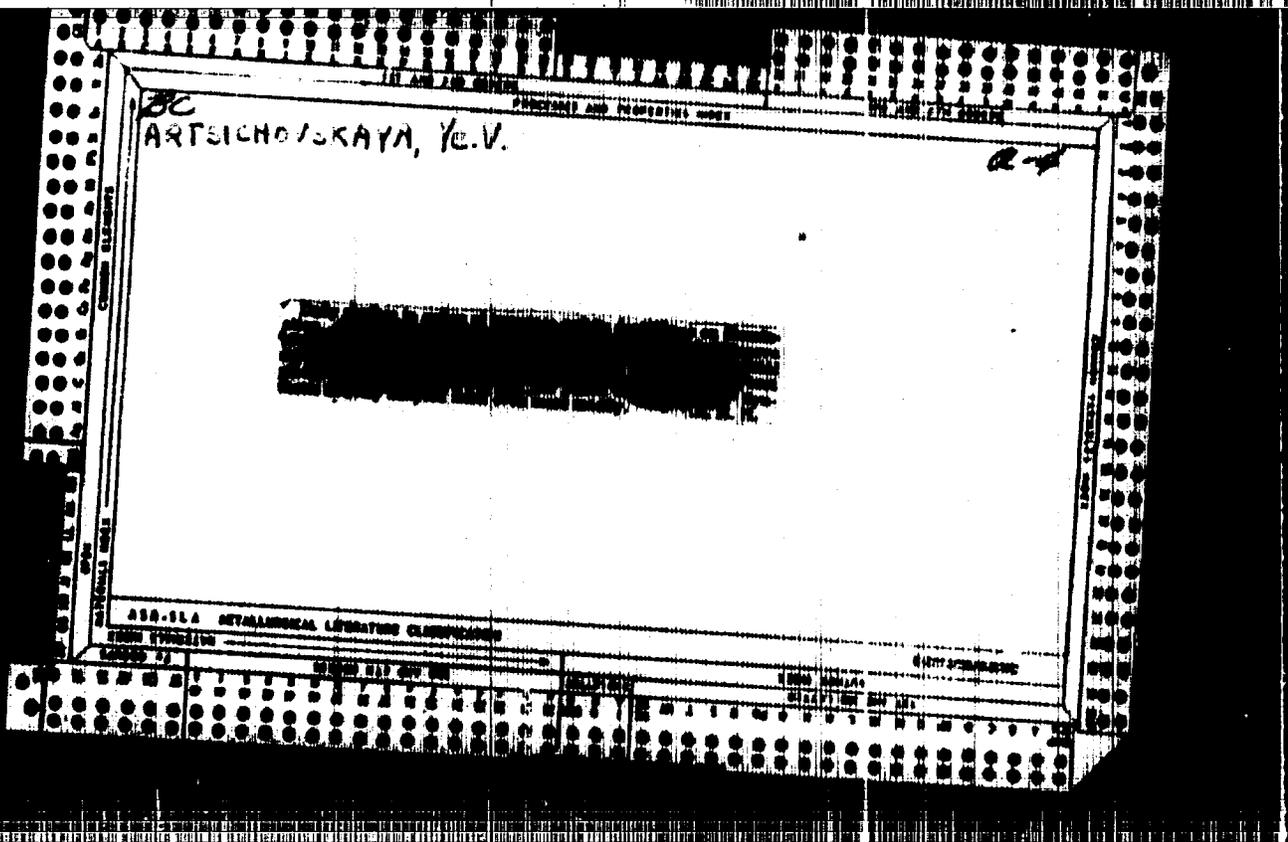


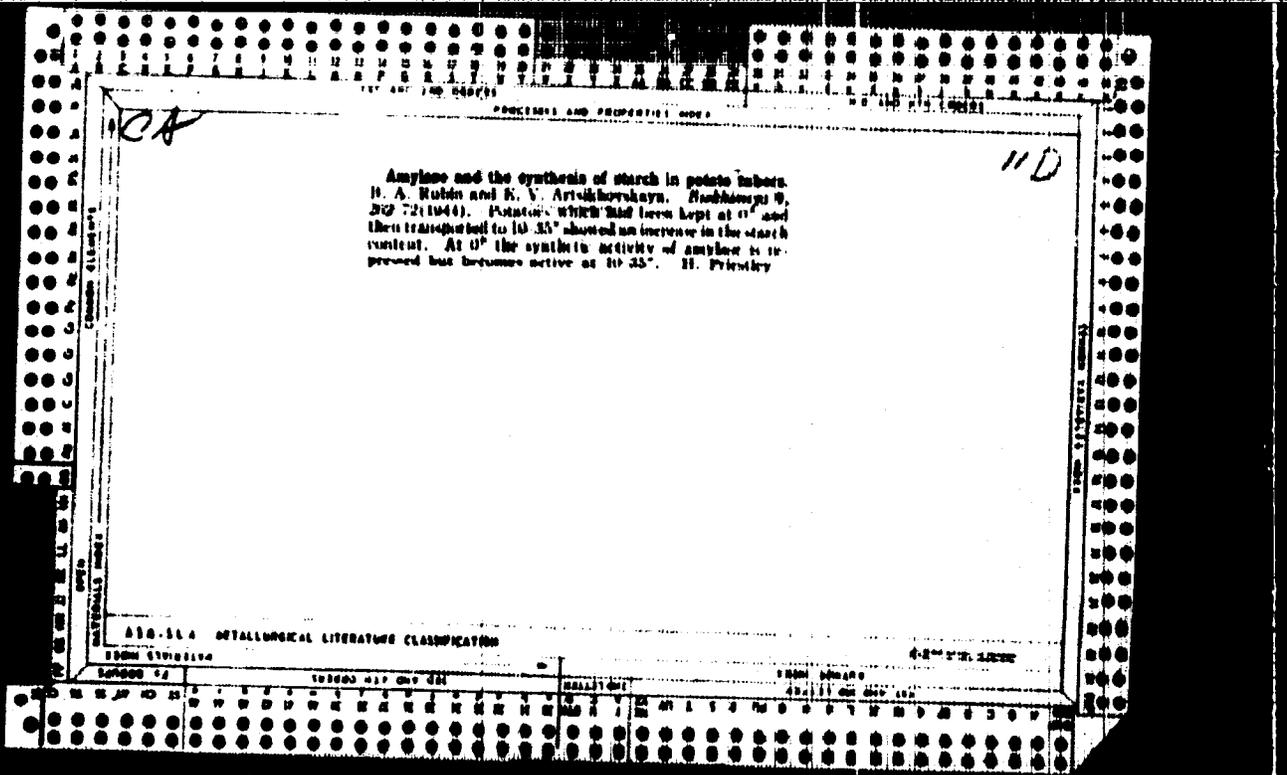


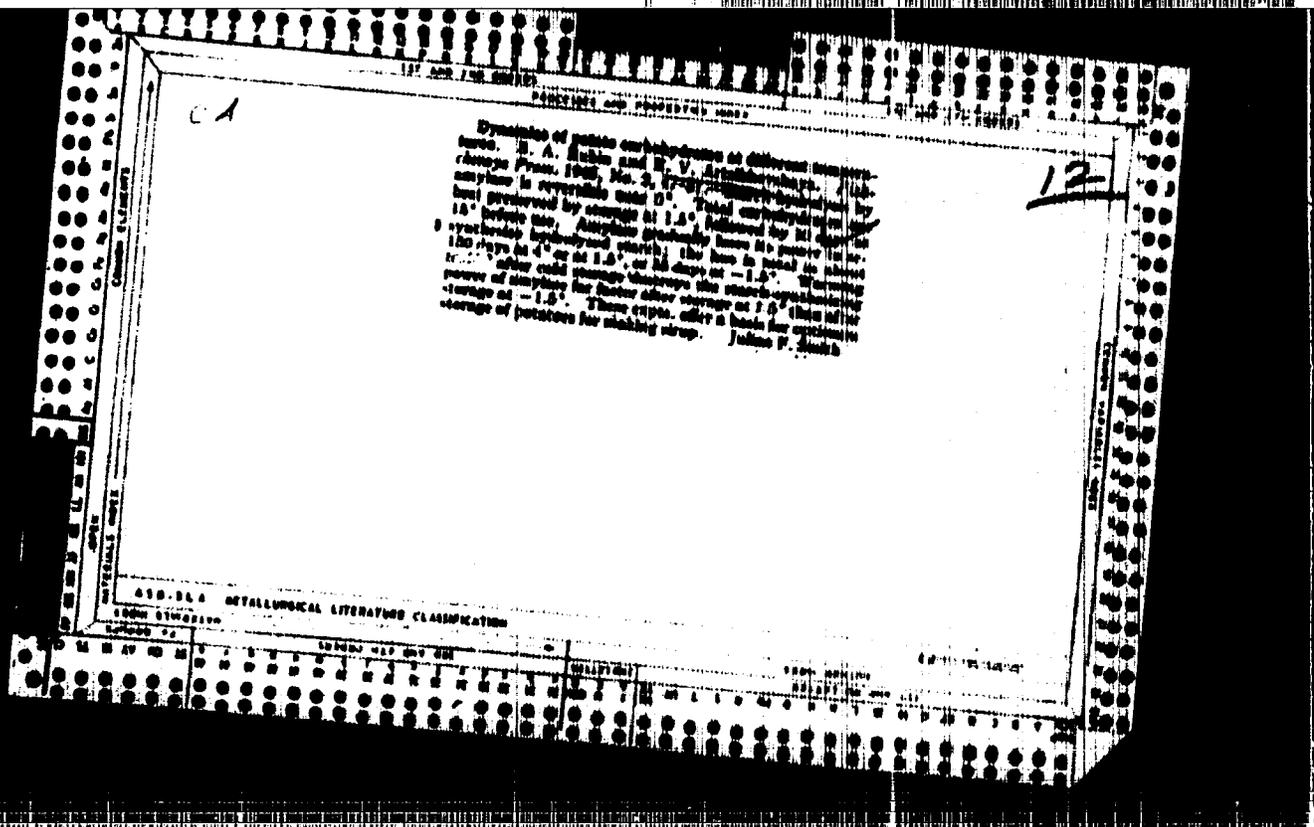


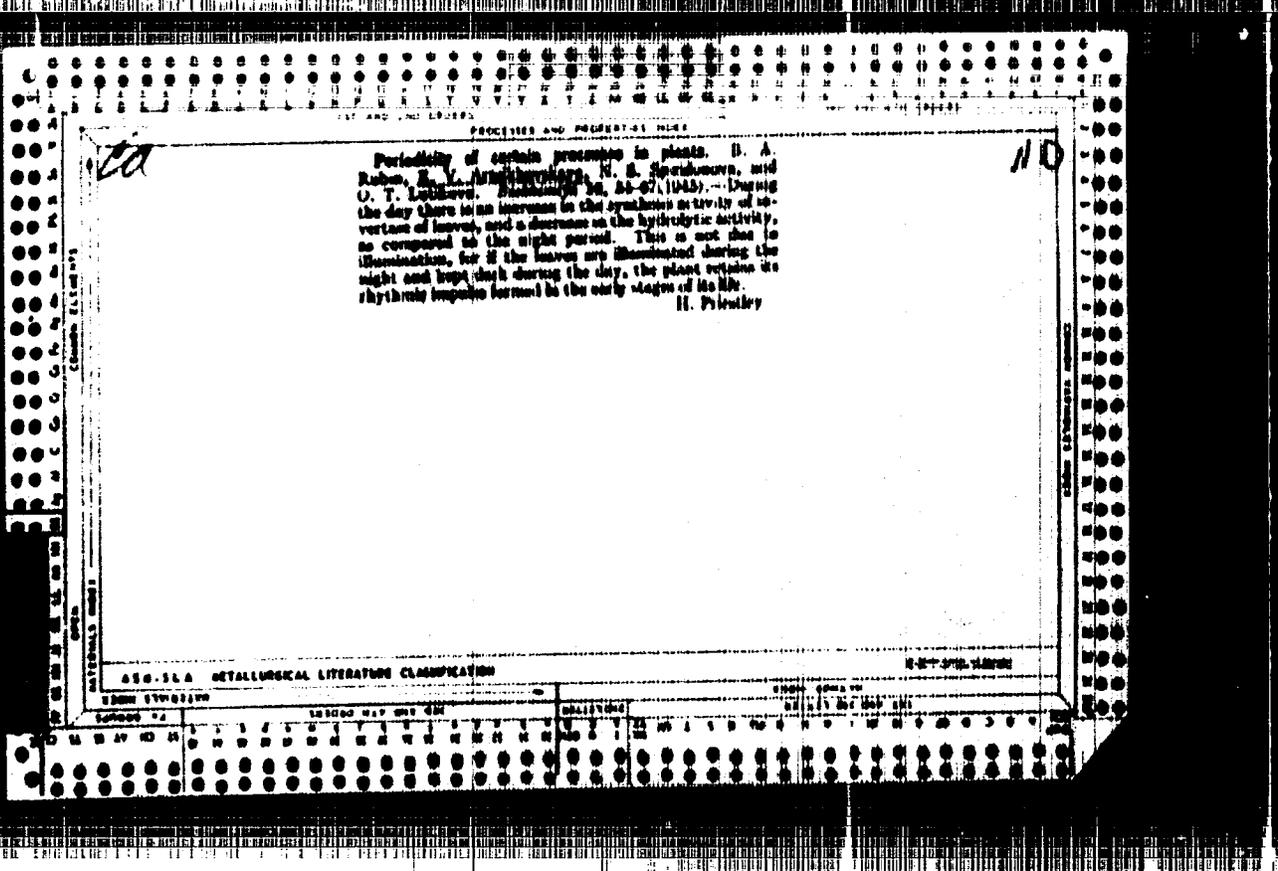


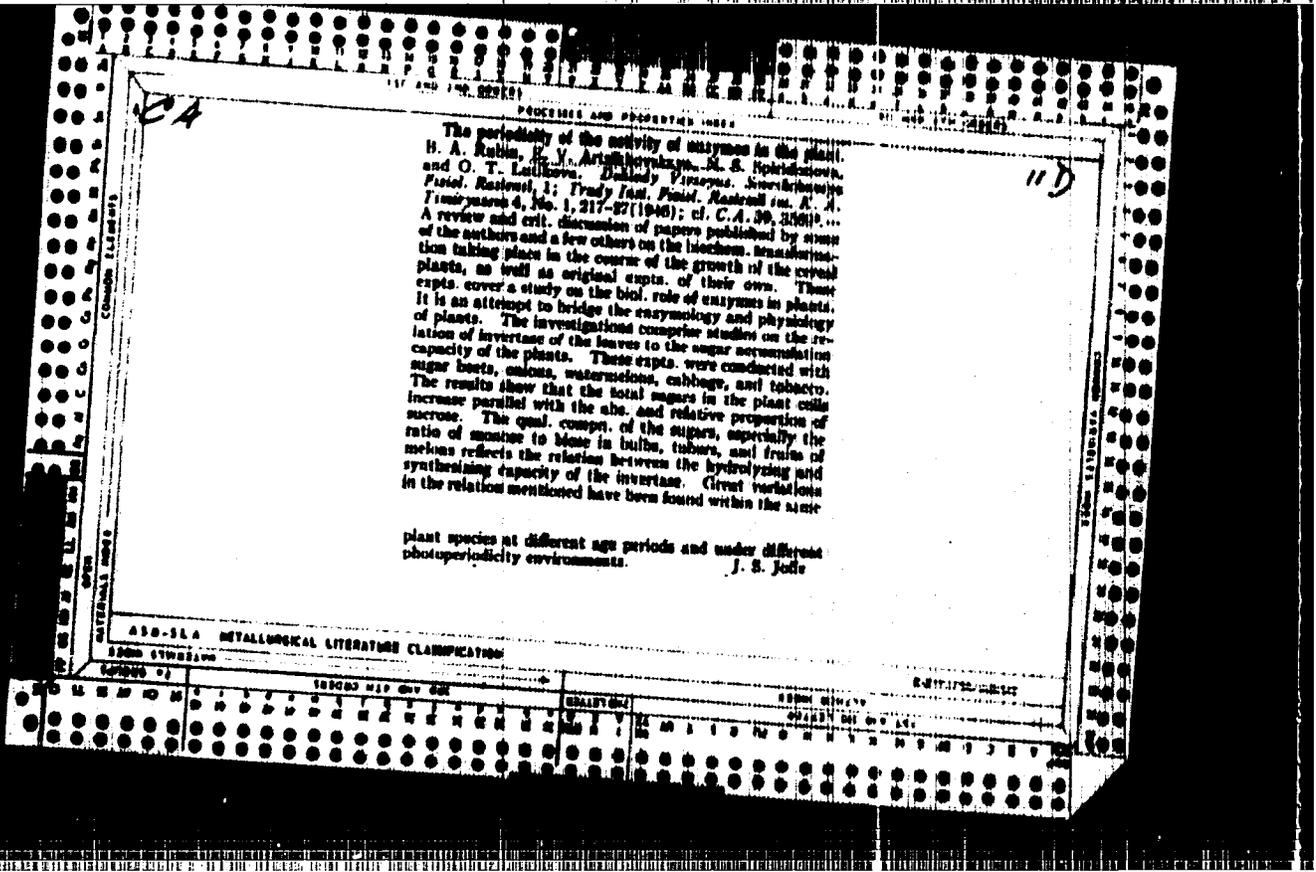


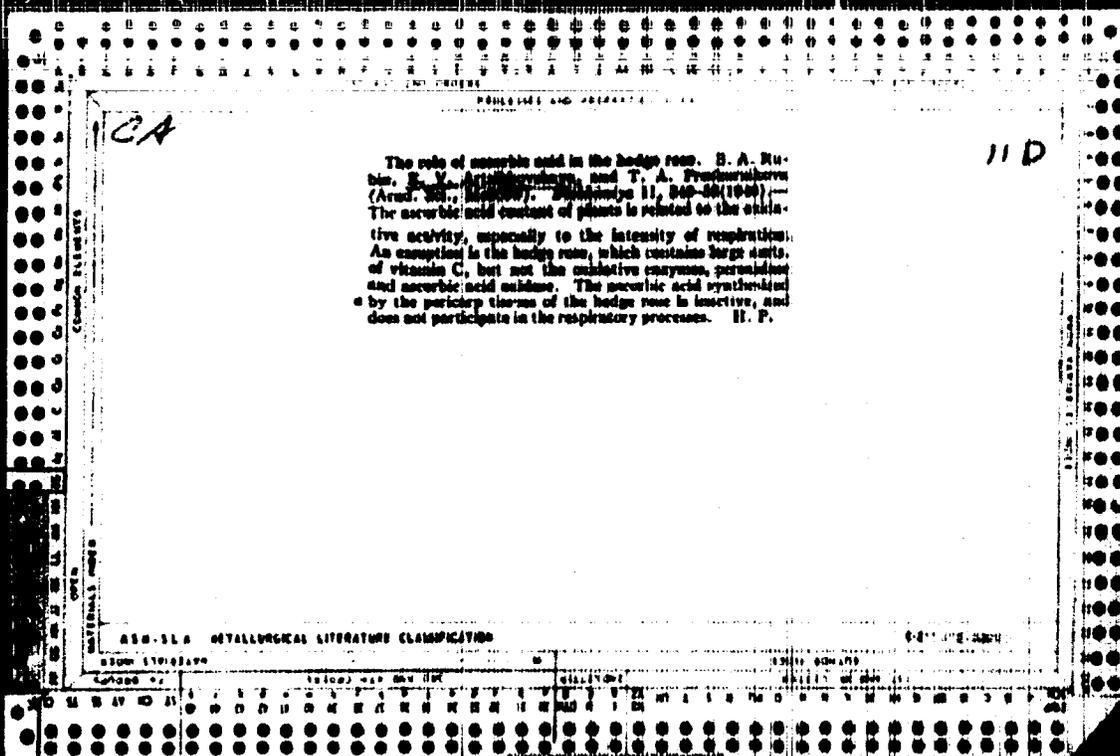












1

"Physiology of the Mutual Relations of Botrytis Cinerella and Cabbage (Brassica Oleracea)," Ye. V. Artaikhovskaya, Institute of Biochemistry, Academy of Sciences of USSR, Moscow, 9 pp

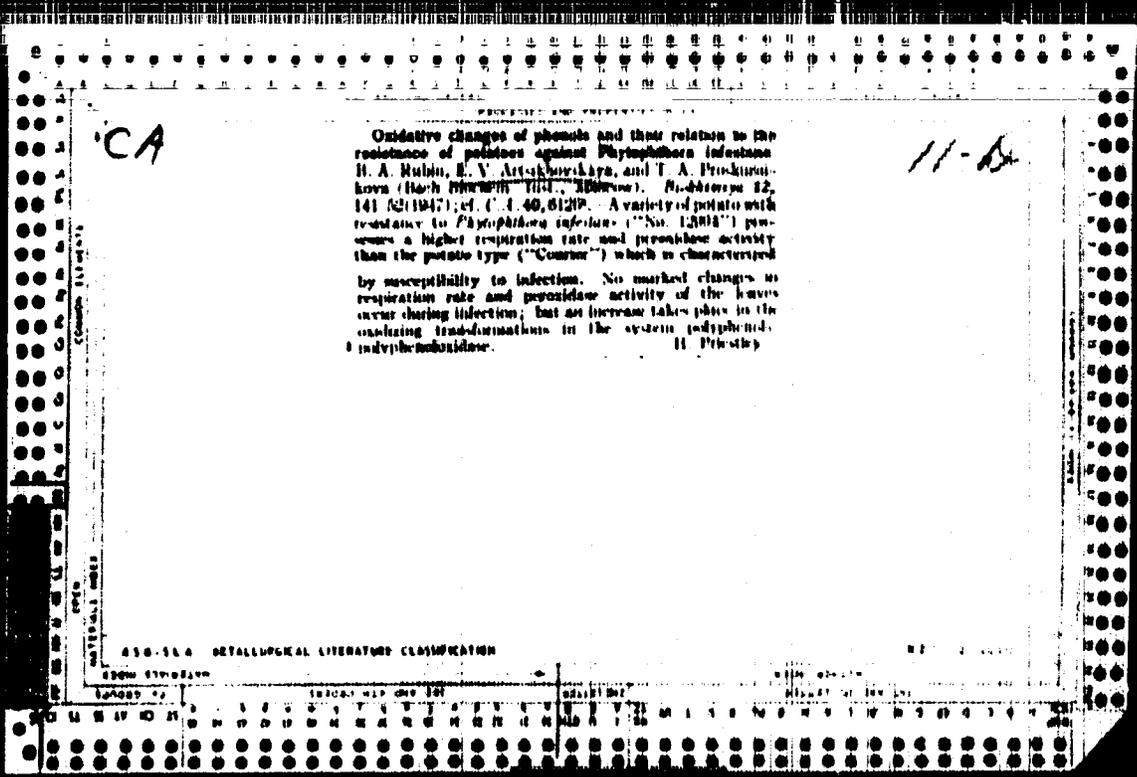
"Mikrobiologiya" Vol. XV, No 1

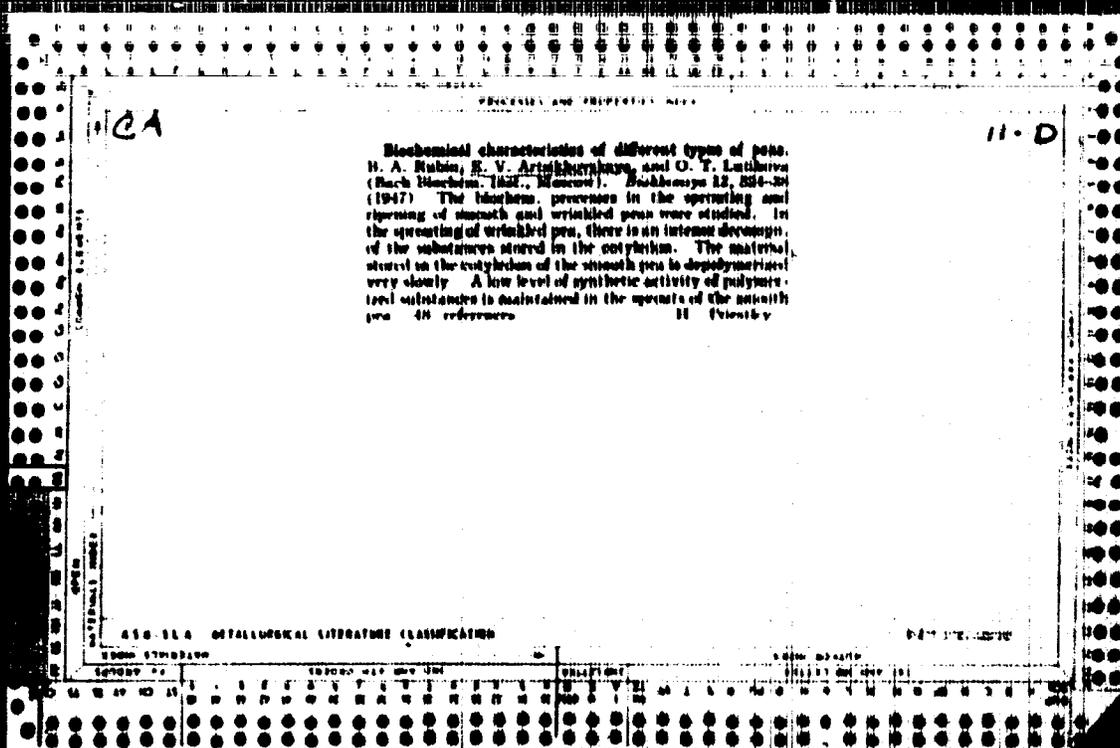
From biochemical study of interaction of tissues of cabbage with toxin of Botrytis cinerea and of analogous lesions arising in the cabbage leaf, conclusions are drawn that stability of stored cabbage to Botrytis cinerea is based on insusceptibility of its cells to the action of the toxin.

ARTSIKHOVSKAYA, E. V.

RUBIN, B. S., ARTSIKHOVSKAYA, E. V., and PRONKURNIKOVA, T. A. "Peculiarities of Oxidative Exchange in Potatoes in Connection with Resistance to Phytophthora infestans," in Reports of the Scientific-Research Work for 1946, Department of Biological Science, Publishing House of Academy of Science USSR, Moscow, 1947, pp.316-317. 511 Ak144

SO: SIRA SI 90-53, 15 Dec. 1953

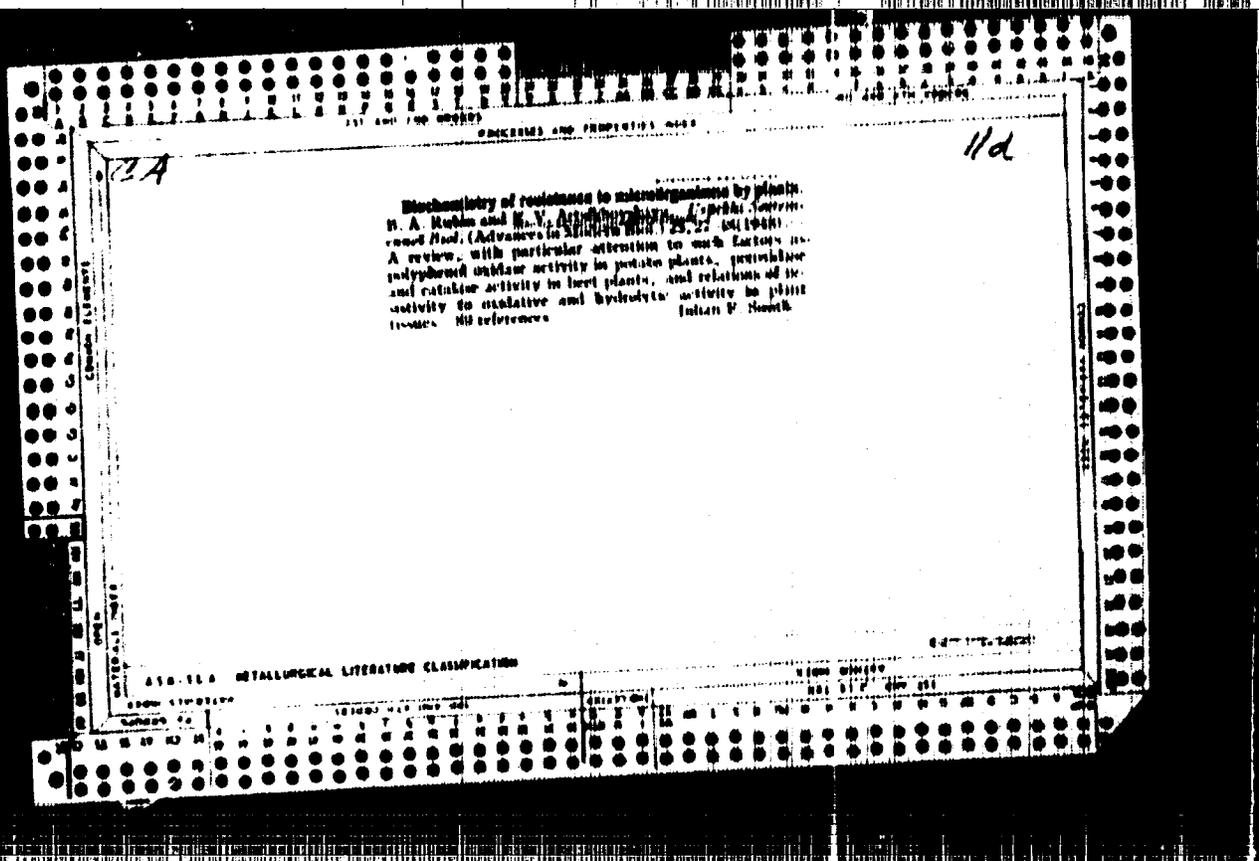




ARTSIKHOVSKAYA, ~~E.~~ V.

and RUBIN, B. A. Biochemical Analysis of Plant Resistance to  
Micro-organisms, Publishing House of the Academy of Science, USSR, Moscow,  
1948, 86 pp. 464.41 R82

So: Sira SI-90-53, 15 Dec. 1953



ARTSIKHOVSKAYA, YE. V.

USSR/Medicine - Plants, Parasites  
Medicine - Microorganisms

Jan/Feb 1948

"Biochemical Resistance of Plants to Microorganisms," E. A. Rubin, Ye. V. Artikhovskaya,  
Moscow, 21 $\frac{1}{2}$  pp

"Uspekhi Sovremen Biol" Vol XXV, No 1

Brief collection of data describes the resistance of plants from the standpoint of  
internal and biochemical dependence on various substances, and is based on an analysis  
of the relation of the plant host to the parasite. Discusses various factors showing the  
biochemical resistance of plants to microorganisms.

PA 41T61

USSR/Medicine - Citrus  
Medicine - Oxidation

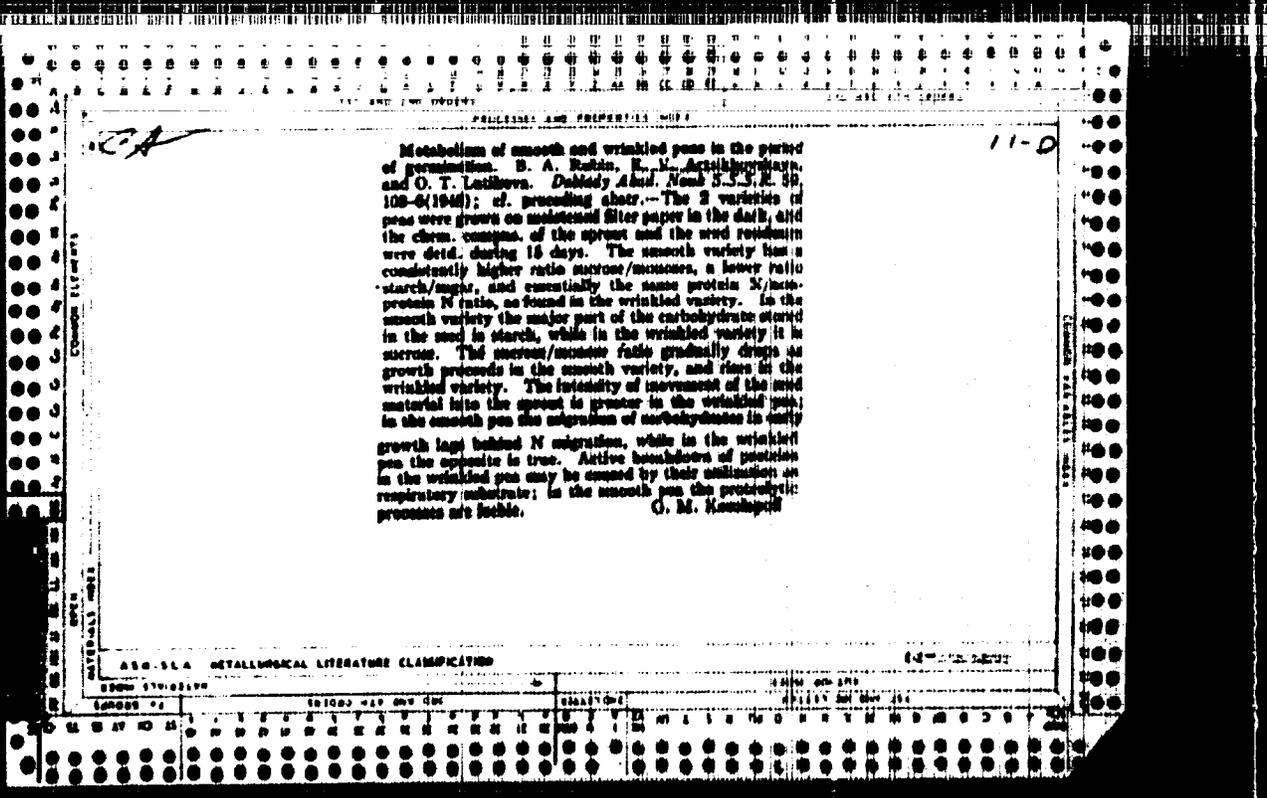
Mar 1948

"Species Peculiarities of the Oxidizing System in Citrus," B. A. Izbicki, Ye. V. Artalkhovskaya, I. M. Ivanova, Moscow Inst Inzhi A. S. Nakh, Acad Sci USSR, 9 pp

"Dokl Akad Nauk SSSR, Nova Ser" Vol LIX, No 8

Gives results of experiments designed to obtain average data on the level of respiratory gas exchange in various tissues of following types of citrus fruits: mandarin (*Citrus reticulata*), orange (*Citrus sinensis*) and lemon (*Citrus limon*). Submitted by Academician A. I. Opariny, 10 Jan 1948

PA47T96



10X  
S. SIKHOVSKAYA, Ye. V.

110

Respiratory gas exchange in the citrus fruits and its role in the stability of the fruit. M. A. Rubin, I. V. Artyukhovich, and I. M. Ivanova. *Doklady Akad. Nauk SSSR*, 66, 425-426 (1960); *ibid.* 69, No. 4, 1033 (1960); *C. I.* 63, 3280. The reaction of the tissues of citrus fruit to a mechanical disturbance (cutting) conditioned with active acetabulum was studied by using the microelectrode method (Semenov and Chaglov, *C. I.* 53, 1001), with lemon, orange, and tangerine. In a tangerine the activation of respiration by cutting is only 20-30%, even in the most sensitive part of the skin (albedo). In the lemon the activation reaches 80% increase in the albedo, while its flavonol activation is 2-3 times that of the tangerine. The orange gives intermediate values. Introduction of 1:1000 soln. of toxin (*Penicillium italicum*) into the skin by vacuum infiltration does not displace the normal respiration of the tangerine, while in the lemon the respiration level rises by 15-20% in 4 hrs. and reaches a level of 25-30%, which is 2.2-2.4 times the norm. attained after infiltration with pure water. Since the toxin affects the peroxidase and dehydrogenase activity, the citrus fruit depends for its resistance to infection, etc., on the degree of sensitivity of the oxidative enzyme systems. The stable varieties of citrus fruit have a high level of a dynamic oxidative activity and react rapidly and strongly to a physical stimulus. G. M. Kirovskoff

INST. Biochem. in A. N. Bakh, Acad. Sci. USSR.

550-558 METALLURGICAL LITERATURE CLASSIFICATION

1948, No. 7.

USSR/Medicine- Sucrose  
Medicine- Carbohydrates, Metabolism

May 1948

"The Role of Sucrose in the Exchange of Plant Carbohydrates," B. A. Rubin,  
Ye. V. Arskikhovskaya, Inst Biochem izeni A. N. Bakh, Acad Sci USSR, 3 pp

"Dok Ak Nauk SSSR " Vol LX, No 5

Previous observations showed that plant starch content is related to sucrose content.  
Describes experiments confirming that amount of sucrose utilized is dependent  
on amount of fixed fructose contained. Submitted by Academician A. K. Oparin  
6 Mar 1948.

PA 68T78

77450

Plant/Medicine - Plants  
Medicine - Metabolism, Effects of Light on  
May 1947

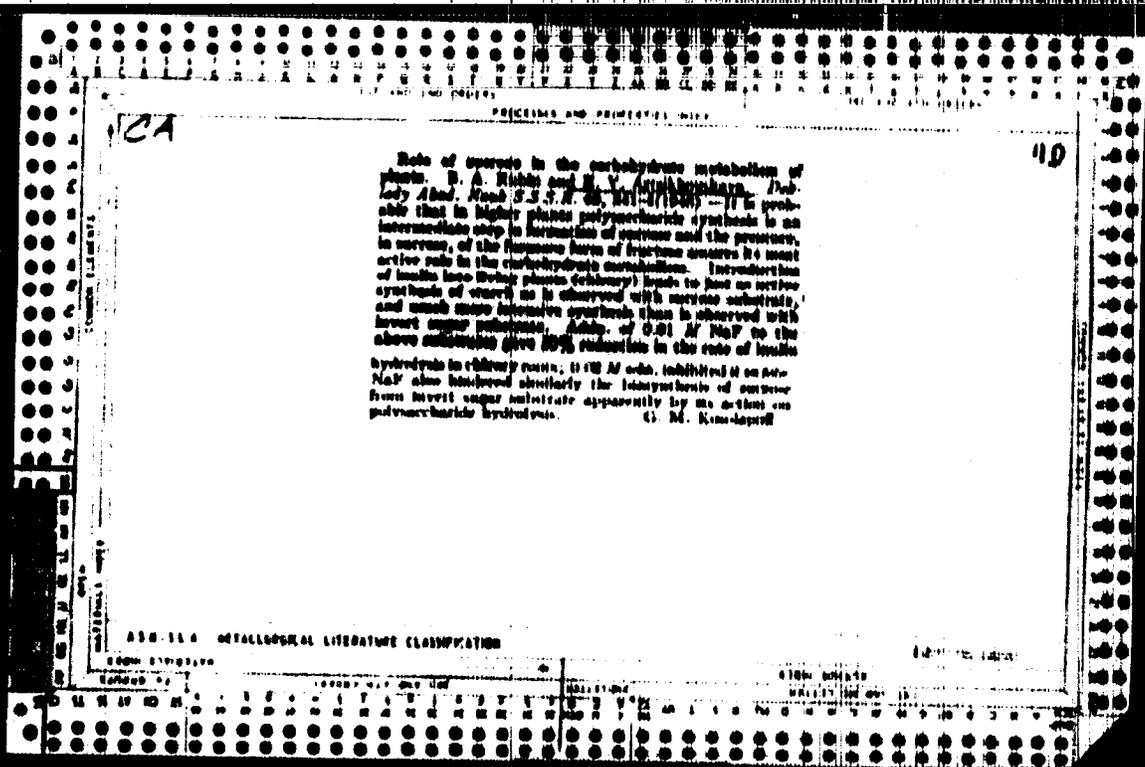
"On Peculiarities of Day and Night Metabolism in Plants," B. Rubin, Ye. Arslanovskaya, V. Sokolova, Izv. Akad. Nauk SSSR, Ser. Biol., 1947, No. 1, 1-10.

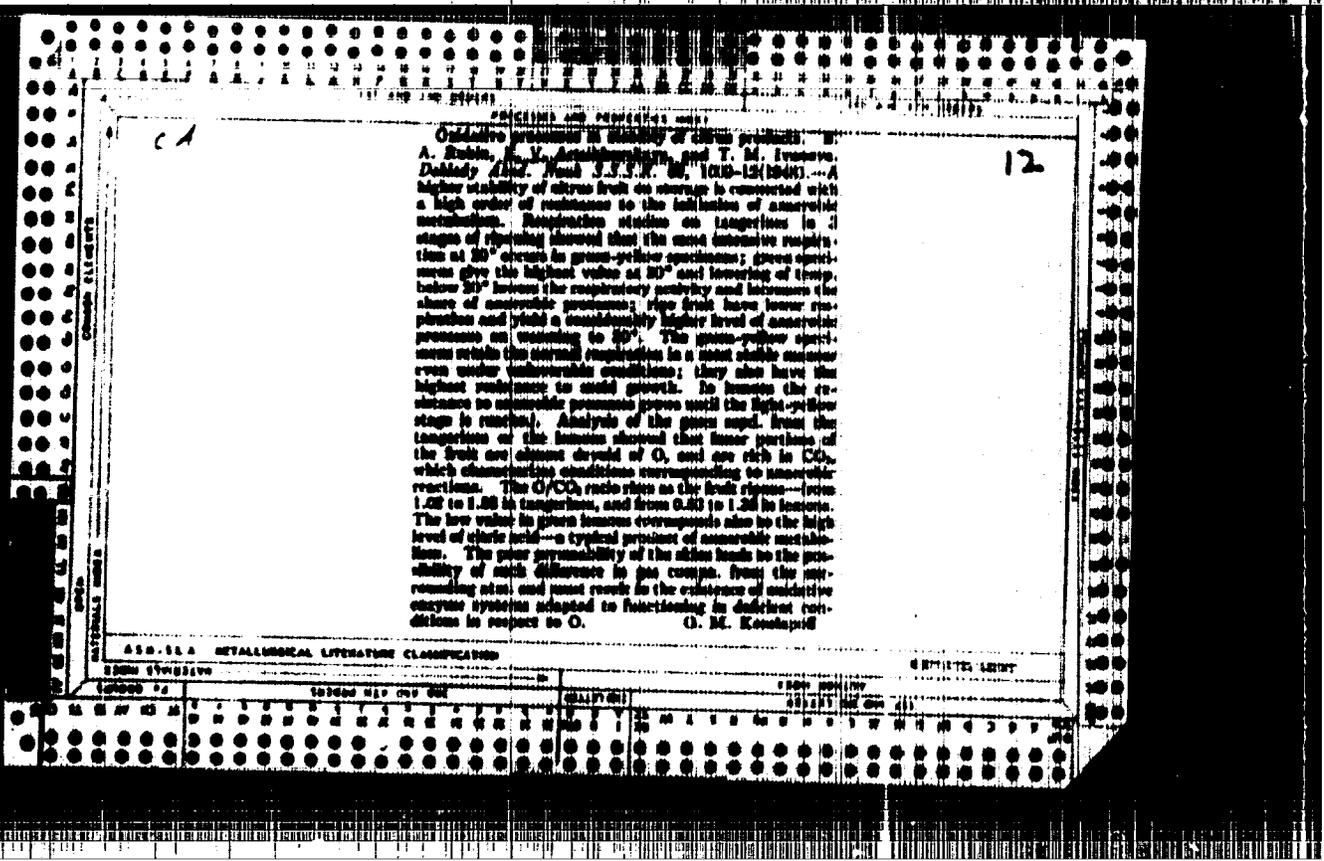
"Plants and Their Growth" Vol. IX, No. 1

Optimum operating temperature of enzymes which control hydrocarbon changes in plants is not constant. Optimum also in course of growth of organisms, direction of these alterations reflecting degree of adaptability of plant to one of most important factors of external medium, such as temperature.

Plant/Medicine - Plants (Fungi) May 1947

Experiments are described and graphs are plotted showing synthesis and decomposition of sucrose against temperature (day and night). Submitted 22 May 1947.

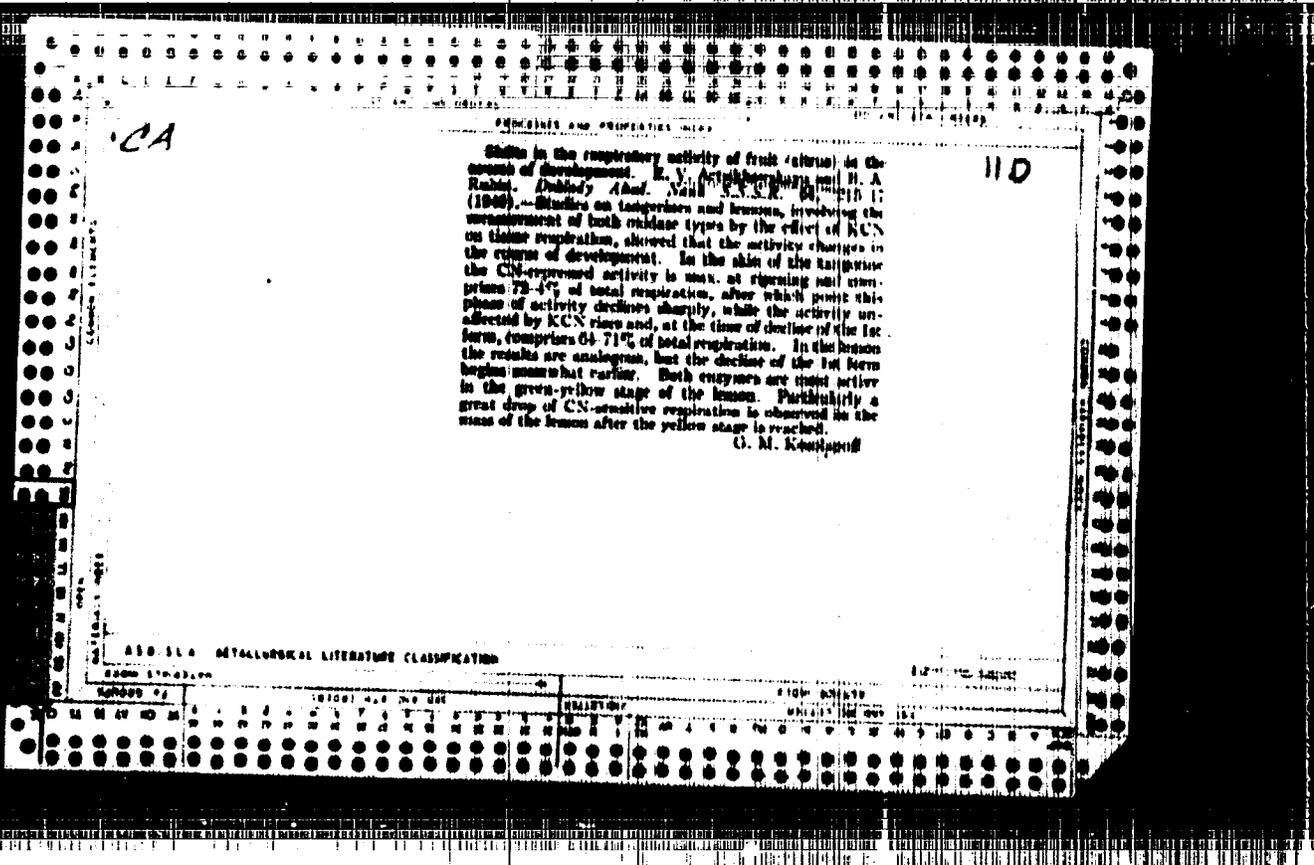




CA

42

Oxidative processes and their role in the biology of various plant organs. I. Role of oxidative processes in phenomenon of stability of fruit of citrus type during storage. B. A. Rubin, P. L. Atkushonchaya, and T. M. Ivanova. *Trudy Khimicheskoye Khimicheskoye, Novosil No. 1, 5 (1948), Sec. 1, 43, 234.* II. Respiratory gas exchange in citrus fruit in connection with the progress of fruit ripening. *Ibid.* No. 11. During the ripening of fruit (orange, lemon, almost up to harvesting, the main role is performed of O<sub>2</sub> falls to an oxidase whose prosthetic group contains platinum with Fe or Cu. In the following stage has attached to aging, the respiration is carried largely by oxidase stable to CN. The change of the oxidase system shows up also in the temp. effects. Thus raising the temp. of green fruit lowers the respiratory coeff. which reaches its min. at 21°C, while in the fruit a lowering of temp. causes a decline of the respiratory coeff. although the level of respiration remains much more stable than is the case for the green fruit. G. M. K.



110

Physiological role of various groups of plant oxidases.  
 B. K. Ananikhin, N. A. Rubin, and T. M. Ivanova.  
 Doklady Akad. Nauk S.S.S.R. 60, 1021 (1949); cf.  
 C. I. 40, 4731c. The seasonal activity of enzymes of  
 tracheal respiration and of peroxidase-containing enzymes in  
 the stems of linden and larches is given by sets of curves  
 (image curves). The former enzymes show a gradual rise  
 with passage of winter and onset of spring, while the latter  
 group give a correspondingly declining curve. A similar  
 study of orange skin under conditions of (1) aridness, (2)  
 infiltration, (3) irrigation, (4) nutrition with 10% CO<sub>2</sub>, and (5)  
 nutrition with N<sub>2</sub> gave different reactions from the regula-  
 tory enzymes sensitive or insensitive to KCN: conditions  
 favouring increased general tissue respiration enhanced ac-  
 tivity of metal-coag. enzymes and vice versa. Condi-  
 tions under which water metabolism is disturbed, such as a  
 preliminary 6-day wilting which reduces general respira-  
 tion, lead to repression of metal-coag. enzymes and ac-  
 tivation of the tracheal respiration enzymes. The differ-  
 ences are not only quantitative but also are ascribed to  
 fundamental differences in the substances. G. M. K.

*Inst. Biochem. in A. N. Bakh. Acad. Sci. USSR.*

14

The adaptation significance of the respiratory metabolism in citron. H. V. Arshinovskaya and N. A. Kuznetsov. *Dokl. Akad. Nauk SSSR* 71: 217-219 (1960). Cf. C. C. 43, 256, 44, 673d. Since the level of fruit (citron, orange) respiration is adapted to the temp. regime of the surrounding medium (20-25°C), the variation must be connected with temp. course of the activity of the enzyme systems. This is well demonstrated by data of the activity of uninhibited and NaN<sub>3</sub>-inhibited specimens (orange, lemon). Thus, lemon at 15° shows 44% uninhibited respiration, while at 30° this is but 30%; in an orange these are 40% and 22% resp. In cooling the temp. from 15° to 20° the rate of NaN<sub>3</sub> respiration is activated much more than the residual (uninhibited) respiration; the increase of 30° results in a 18.5-fold rise of total respiration, while the stable respiration rises only by 1.2 fold, in citrus, with oranges, in lemon these are 11% and 8.0% resp. In lemon the changed effect occurs in 20-30° range. G. M. Kozlovskiy

Participation of various cellular groups in protective re-  
 actions of cells. B. A. Kuzin, R. V. Agikhovskaya, and  
 T. M. Ivanova. Doklady Akad. Nauk S.S.S.R. 191: 101-103  
 (1968).—Study of storage-stable and storage-sensitive  
 varieties of beans by the Warburg technique, with  
 records and photo-timer apparatus showed that the ex-  
 position to cold injury (anoxia) varies with time. From  
 September on with increased total respiration the rate of  
 response is weak until the time of total ripeness is reached  
 when the response rises sharply. The respiration increases  
 in this late stage of growth is largely due to the CN-sta-  
 sensitive factor. Only in November, however (total  
 ripening) does the CN-sensitive system enhance a sharp  
 temporary rise. The less stable leaves variety display a  
 lower respiration rate than the stable one. Infiltration  
 with the toxin from *Aspergillus solani* leads to activation  
 of CN-stable respiration and decrease of CN-sensitive factor  
 in the storage-stable variety; with the other variety there  
 is but a slight effect.

G. M. Kozlovskiy

CA

112

Organic peroxide as a possible source of oxygen in  
respiration of some plant tissues. E. Y. Aristovskiy,  
and B. A. Rubin. *Doklady Akad. Nauk S.S.S.R.* 140:  
112 (1960).--Data of org. peroxide in tissues of citrus fruit  
in various stages of development showed that in the skin the  
peroxide appear only near ripening period, while in the  
flesh of the fruit the max. amt. is found in green fruit; in all  
tissues max. peroxide level is reached later than the full  
ripening; highest levels are found in the skin albedo layer  
and in the tissues of the flesh of the fruit. The amt. of  
peroxide far exceeds that of free O<sub>2</sub> (10-15 times), both show-  
ing parallel variations, affected similarly by exposure to O<sub>2</sub>-  
rich atm. The peroxide form in flavo cells and are  
gradually transported to the inner portions of the fruit  
(only flavo and albedo cells are capable of synthesizing  
org. peroxide; the inner tissues are incapable of this syn-  
thesis. C. M. Knocheloff

CA

Oxidation processes and their role in the biology of various plant organs. III. The role of peroxide compounds in the supply of tissues of citrus fruit with oxygen. B. V. Artamonov, B. A. Rubin, and T. M. Ivanova (K. N. Baikal-Balchik Inst. Moscow), *Biokhimiya Plodov i Oveschok*, *Sbornik 2*, 5-27 (1961); cf. *CA* 46, 2822b. —The outer coatings of lemons, limes, and oranges are impermeable to  $O_2$  since  $O$  consumption by the living tissues proceeds constantly, the supply must be by indirect paths, most probably by the way of dry peroxide. The source of the latter rises in passing from the outer to the inner parts of the fruit, and is much higher than amount of  $O_2$  in given tissues. The tissues of the inner of the fruit, which are high in peroxide do not normally synthesize the peroxide; these are formed in the outer coatings, particularly in the flavedo. However, fruit kept 24 hrs. in pure  $O_2$  show a 2% increase of the  $O$  content in their internal gas spaces, with a similar rise of  $CO_2$ ; after a 48-hr. exposure the  $O$  content declines again to near-normal level but  $CO_2$

is doubled, indicating a state of  $O$ -saturation. Varietal differences of  $O$ -rich gas results as 6% in a sharp rise of  $O$  content and a drop to  $CO_2$  after 24 hr. However,  $O$  content shows a steady drop while  $CO_2$  rises after 24 hrs. Tissues with an earthy orange show that the concentration with the surrounding air is maintained only in the region at the site of the fruit stem and the innermost cells, was distributed from it only by the skin vessels; paths for distribution of gases, however, do not involve the cuticle. Sealing coating of thin with impermeable plastic failed to alter the gas exchanges described above. The peroxide content is not time-constant, but shows a sharp max. (in lemons) in April in the skin and a more diffuse max. in March in the fruit stem. Skin of green fruit is devoid of peroxide, but these must contain small amounts of them. In  $O$ -rich air (pure  $O_2$ ) the fruit skin increases its peroxide content within 24 hrs., especially in the flavedo, after which a steady decline sets in; the inner parts of the fruit show increased peroxide content only some 24 hrs. later followed again by a moderate decline. The albedo shows a rise of the peroxide after some 48 hrs., after which there is a steady drop to 25% of normal level. kept in anaerobic conditions the fruit specimens show a rise of peroxide in the flavedo after a 24-hr. exposure, explained by rapid absorption of  $O_2$  from exposure to normal air, necessary for the analysis; a 48-hr. anaerobic exposure, however, causes such depletion that the analytical outcome is not sufficient to study the  $O$  content

over

and the peroxide level is subnormal. The albedo shows subnormal peroxide level after any anaerobic exposure; the rest of the fruit shows this only after 48-hr. exposure. A CO<sub>2</sub>-rich atm. does not alter the peroxide content in fruit meat, in 48-hr. exp. These changes by cutting across a steady rise of peroxide in the albedo, very marked in the albedo, and very little change in the internal meat of the fruit. If the tissue damage is done in conjunction with 0.5% of KCN used as a covering for the albedo then, the content of peroxide was the same as found in albedo without KCN. IV. Characterization of the respiratory metabolism of citrus during ripening period. (See 21-22) ---In the course of ripening of citrus fruit (lemon, tangerine, orange) the O<sub>2</sub> supply to the tissues is restricted and an

increasing role is played by oxidant that do not contain heavy metals, while the activity of Fe and Cu peroxide is restrained. The effect of increase in temp. on intensity of respiration is to raise the latter if it is accompanied by water-bearing oxidant, while the residual respiration is apparently unaffected. Hence the shift in the oxidative system during ripening is an example of adaptation of the fruit to surroundings, making possible a maintenance of a vital function under low-temp. conditions. During ripening the protective system also change. In the ripening fruit the action of polymeric peroxide or mechanical stress decreases bringing into play the metal-bearing oxidant, while before ripening and in storage of ripe fruit, the residual oxidant are operative. A brief treatment of ripe fruit with high temp. (50-60°) seems to aid their storability; an exposure to high CO<sub>2</sub> content serves a similar purpose. Both treatments eliminate the activity of the residual oxidant which are more stable under unfavorable conditions. (1, 24, 25)

CR

11-7

Temperature regulation of respiration in *Hevea* clones  
V. K. Nakhova and M. Y. Artyukhovich, *Doklady  
Akad. Nauk S.S.S.R.* 84, 177 (1953). Specimens kept  
at 20° show less increase in the rate of respiration in equal  
runs in which temp. is varied from 0° to 20° than in others  
by cultures grown at 2°. Thus the temp. acts as a stimulus  
or irritant rather than as an adaptation factor. The ir-  
ritant effect is greater with younger cultures than with older  
ones. The differences of temp. adaptations in higher plants  
are discussed. (1) M. Koshchikov

CA

12

Formation of ethyl alcohol and acetaldehyde in apple skin.  
 M. V. Anisimovskiy and V. K. Kabanov (A. S. N. Pash Institute, Moscow). *Doklady Akad. Nauk S.S.S.R.* 64, 762-4 (1962).—The content of EtOH and a slight rise in the max. rate of growth of the fruit. In the case of the apple skin by 100% from August to January. In the case of the apple and by 207% in the skin. AcHl content rises with ripening, the level remaining well below that of EtOH. As full ripeness the AcHl level rises sharply and in storage in midwinter the increase may reach 72% of EtOH. By January the AcHl content begins to decline in the meat, but remains nearly constant in the skin. The lowered (1) content of the surroundings almost has no effect on the content of EtOH, indicating anaerobic nature of its formation. AcHl content rises as the O<sub>2</sub> content in the air is increased, however, the effect shows up in the skin more readily, and least readily in the meat. The formation of the anaerobic products is enhanced by raised temp. (range of 11-20° studied). The temp. coeff. for EtOH formation is nearly 1; that of AcHl ranges from 1.2 to 1.3.

G. M. Kondapoff

ARTSIKHOVSKAYA, Ye. V.  
RUBIN, A. A.; SKOCLOVA, V. Ye.;  
ARTSIKHOVSKAYA, Ye. V.

Adaptation of respiratorial gas exchange of apiles to conditions of the  
environment. Dokl. AN SSSR 85 No. 4, 1952

SO: MLRA November 1952

АРТЮХОВ/СКЛЯ, Ю. В.

IVANOVA, T. M.; RUBIN, B. A.; ARTSIFHOVENIA, E. Y. & SCHOLOVA, V. YE.

Enzymes

Role of separate oxidases in the respiration of apples. Dokl. AN SSSR 85, No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ December 1957. Unclassified.

2

1. HURIN, B. A.; SOKOLOVA, V. Ye.; ARTSIKHOVSKAYA, Ye. V.

2. USSR (600)

4. Apple

7. Adjustment of the respiration of apples to temperature, Dokl. AN SSSR, 86,  
No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.



ARTSIKHOVSKAYA, Ye.V. (Moscow); RUBIN, B.A. (Moscow).

Plant respiration as an adaptation function. *Usp. sov. biol.* 37 no.2:  
136-157 Apr '54. (MKRA 7:5)



В. П. Чистяков

Verification system and security of plans. M. A. ...  
E. P. Chistyakov ...  
Checked by ...  
The process of ...  
system ...  
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OPARIN, A.I., akademik, otv.red.; SHAROVATOVA, I.I., red.  
1sd-vs; YEGOROVA, N.F., tekhn.red.

[Biochemistry and physiology of immunity in plants:] Biokhi-  
mia i fiziologiya immuniteta rastenii. Moskva, 1sd-vo Akad.  
nauk SSSR, 1960. 350 p. (MIRA 14:2)  
(Plants—Disease and pest resistance)

*АА ДИАТОКСИНА, YE. V.*

ARTSIKHOVSKAIA, YE. V., IVANOVA, T. M., AKSENOVA, V. A., and  
LAD'GINA, M. YE. (USSR)

"The Nature of the Toxic Action of Botrytis cinerea."

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 Aug 1961

RUBIN, B.A. (Moskva); ARTSIKHOVSKAYA, Ye.V. (Moskva)

Biochemical mechanisms of the disturbance of normal pigmentation of  
plant tissues. Usp. sov. biol. 57 no.2:317-337 Mar-Apr '64.  
(MIRA 17:4)

ARTSIKHOVSKAYA, Ye.V.

Some problems in the biochemistry of plant immunity. *Usp. biol.*  
khim. 5:275-288 '63.  
(MIRA 17:3)

ARTSIKHOVSKIY, A.V.

KOLCHIN, B.A.; ARTSIKHOVSKIY, A.V., doktor istoricheskikh nauk, professor, ret-sensent; KURULOV, L.V., kandidat tekhnicheskikh nauk, ret-sensent; KOSTOMAROV, V.M., kandidat tekhnicheskikh nauk, redaktor.

[Metalworking techniques in ancient Russia] Tekhnika obrabotki metalla v drevnei Rusi. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1953. 158 p. (METRA 7:6)

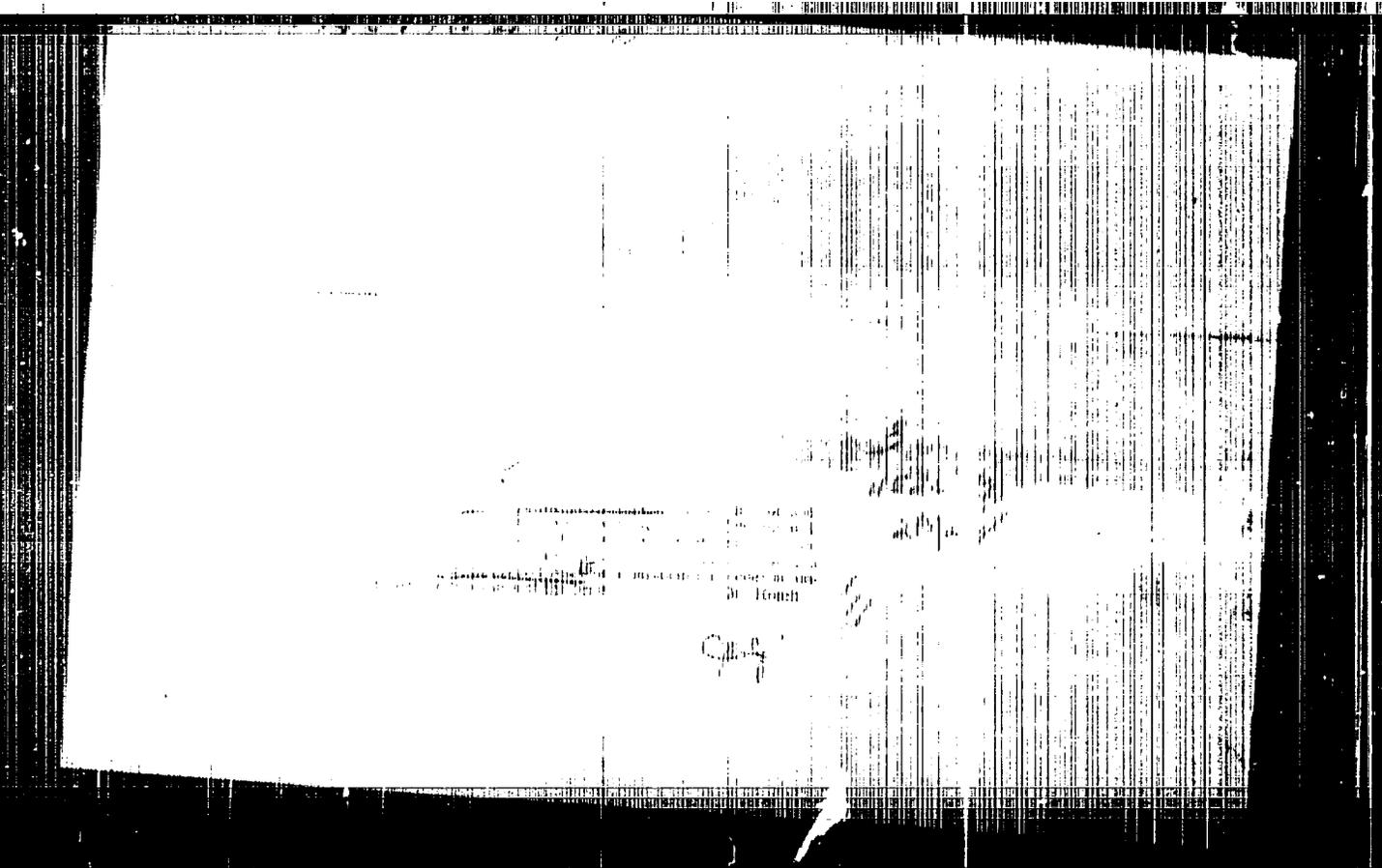
ARTSIKHOVSKIY, Arseny Vladimirovich, 1902-

[New discoveries in Novgorod] *Novye otkrytiia v Novgorode.*  
Izd-vo Akademii nauk SSSR, 1955. 54 p. (MIRA 8:12)  
(Novgorod--Paleography)

ARTSIKHOVSKIY, A.V.

"Donnees archeologiques sur la question variegue."

Report submitted to the 6th Intl. Cong. of the Intl. Union of  
Prehistoric and Prohistoric Sciences, Rome, Italy 29 Aug-3 Sep 1962



ARTSINOVICH, A. N.

Universal adjustment of turret lathes Moskva Gos.  
izd-vo obr. promyshl., 1942.

99 p. (52-45905)

TJ1218.A7

1. Lathes.

2105 Artsimovich, A.N.

7. Tekhnologiya Metallov

Zadalka Rakovin I Drukov V Litve 12 Splavov Tsvetnykh Metallov. M., 1954.  
8 s. 25 sm. (Akad. Nauk SSSR In-T Tekhn. - Ekon. Informatsii. Periodich.  
Informatsna. Tema No 9). 1.000 EKZ. V. Ts. - Na Out. Is Ukazan. ---  
(54-56471) 621.741.58-621.746.7

ARTSIMOVICH, A. N.

262

Zadalka I Markirovka Kontsov Montashnyx Provodov I Shil Kabely. M., 1954.  
15 S. S111 25 SM. (Akad-Nauk SSSR. In-t Tekhn.-Ekon. Informatsii. Periodich  
Informatsiya. Tema No. 42). 1.160 SKZ. B. Ts. Na Ubl. Avt. No Ukazaniy.  
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PHASE I BOOK EXPLOITATION

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PURPOSE: The book is intended as a textbook for students in radio  
engineering and electro-mechanical technical schools.  
It may be useful to technologists and forement taking courses  
to increase their qualifications and also helpful to engineers  
and technicians employed by instrument manufacturing  
enterprises.

COVERAGE: The book describes special technological processes which  
may be employed by plants producing instruments and  
equipment. A significant portion of the book is devoted  
to the electrical wiring of equipment, methods of marking  
electrical components, connecting wires and cables.

Card 1/7

Special Technological Processes in Instrument Manufacture (Cont.) 121

Sufficiently full treatment is given to soldering and brazing, and to modern methods of brazing such as brazing in protective hydrogen atmosphere, high frequency induction brazing, and ultrasonic brazing (aluminum and aluminum alloys). Separate chapters are devoted to the technology of producing ceramic parts, to casting of nonferrous alloys, to investment casting, glueing of metals and nonmetallic materials, etc. The text is illustrated with detailed data, technical specifications, manufacturing instructions, standards, etc. A list of official specification instructions used in the book is given at the end. There are no references and there is no mention of personalities.

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~~ARTSIMOVICH, Aleksandr Nikolaevich; KASHIN, N.V., otvetstvennyy redaktor;~~  
~~BAIBV, V.A., redaktor; KONTOROVICH, A.I., tekhnicheskiy redaktor~~

[Special technological processes in instrument manufacture] Spetsial'-  
nye tekhnologicheskie protsessy v priborostroeni. Leningrad, Gos.  
soiuznoe isd-vo sudstroit. promyshl., 1957. 262 p. (MIRA 10:9)  
(Instrument industry)

ARTSIMOVICH, D.I.

Some spectral regularities of supramaximum back-effect photocells.  
Dop. ta pov. L'viv. un. no.7 pt.3:241-243 '57. (MIRA 11:2)  
(Photoelectric cells)

ARTSIMOVICH, D.I.

~~Some inertia properties of cuprous-oxide back-effect photocells.~~  
Dop. ta pov. L'viv. un. no.7 pt.3:243-245 '57. (MIRA 11:2)  
(Photoelectric cells)

ARTSIMOVICH, D.I.

Inertia properties of cuprous-oxide back-effect photocells  
prepared under reduced pressure of the oxidizing medium. Dop. ta  
pov. L'viv. un. no.7 pt.3:245-248 1977. (MIRA 11:2)  
(Photoelectro cells)

124-58-6-7017

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TITLE: An Optical Method Used With High-speed Photography to Study Stress Distribution in Impact-loaded Materials (Primeneniye opticheskogo metoda v sochetanii s vysokoskorostnoy fotografiruyemykh dlya izucheniya raspredeleniya napryazheniy v materiale pri udarnykh nagruzkakh)

PERIODICAL: Izv. Dnepropetr. gorn. in-ta, 1957, Vol 30, Nr 2, pp 109-118

ABSTRACT: The purpose of this study was to determine the stress distribution that develops in rock subjected to the action of a cutting tool and to ascertain the variations that occur in the character of the stress distribution when different types of cutting tools are used and when the relationship of the static and dynamic forces applied to the cutting tool is varied.

(Reviewer's name not given)

1. Rock--Stresses 2. High speed photography--applications  
Card 1/1 3. Cutting tools--Performance

ARTSINGOVICH, G. V., Cand Tech Sci — (diss) "Experimental Research and Production Testing of the Submersible Hydraulic Impact Machine DGI for the Boring of Deep Exploratory Wells." Dnepropetrovsk, 1960, 15 pp (Dnepropetrovsk Order of Labor Red Banner Mining Institute im Artem) 150 copies, no price given (KL, 21-60, 122)

FILIPPOVA, Ye.S.; YASOV, V.G.; MUSIYENKO, I.A.; ARSINOVICH, G.V.;  
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SIRIK, V.F.; SMIRNOV, L.V., otv. red.; KOSTON'YAN, A.Ya.,  
red. izd-va; MAKSIMOVA, V.V., tekhn. red.

[Combination drilling of holes with hydraulic drills] Udarno-  
vrashchatel'noe burenie skvashin gidroudarnikami. Moskva,  
Gosgortekhsdat, 1963. 83 p. (Boring) (MIRA 16:5)